[Audio] A discussion on “One-Rank One Pension Scheme

Estimates and Analysis of Farm Income in India, 1983-84 to 2011-12(Fodder on Agriculture , epw,essay)

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This paper presents estimates of farmers’ incomes from agriculture over the past three decades. The income earned by farmers from agricultural activities after paying for input costs and the wages for hired labour has seen low to high growth in different periods during the last three decades. In none of the periods do farmers’ income or profitability of farming show any squeeze. The pace of growth in farmers’ income that began around 2004-05, which reduced the disparity in growth in incomes of farmers and non-farmers, could not be sustained after 2011-12. It looks like the growth in farm income after 2011-12 has plummeted to around 1%, and this is an important reason for the sudden rise in agrarian distress in recent years.

Big Data to Improve Urban Planning(Urban Planning,epw,SciTech)

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Data analytics is a frontier field where the tools and techniques are still being developed.

Expertise, a critical input, is in short supply, the other being access to data. Even so, Colombo-based LIRNEasia has demonstrated the value of mobile network big data for urban planning in Sri Lanka's capital city. Pseudonymised, historical call detail records from multiple mobile operators have been analysed to understand and monitor land use, congregations of people, peak and off-peak travel patterns, communities, and traffic.

Data, Urbanisation and the City(SciTech,Plity ,epw)

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By using the enormous processing capacity of computing that is now available, we can, it is claimed, improve how cities are governed—make them smart! This review attempts to illuminate how data reveals relationships between citizens and the state and thus facilitates an informed debate on whether data can be deployed to build a more inclusive and constructive relationship between citizens and their government. As urbanisation deepens, we see struggles around who gets to decide what is to be governed and how the data is to be collected and deployed and what technologies and skills are to be deployed for implementation. The papers in this collection can be viewed in three groups, respectively, dealing with three issues: data collection processes, intra-urban spatial inequities and use of new sensing technologies.

The Four Parts of Privacyin India(epw,essay,)

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Privacy enjoys an abundance of meanings. It is claimed in diverse situations every day by everyone against other people, society and the state. Traditionally traced to classical liberalism's public-private divide, there are now several theoretical conceptions of privacy that collaborate and sometimes contend. Indian privacy law is evolving in response to four types of privacy claims: against the press, against state surveillance, for decisional autonomy and in relation to personal information. The Supreme Court has selectively borrowed competing foreign privacy norms, primarily American, to create an unconvincing pastiche of privacy law in India. These developments are undermined by a lack of theoretical clarity and the continuing tension between individual freedoms and communitarian values.

Bhairav Acharya (*bhairav.acharya@gmail.com*) is a constitutional lawyer who is interested in free speech, privacy and technology. He writes at www.notacoda.net

In a celebrated paper in 2006, a leading privacy law expert invoked the despair of God who, like the playwright in Jorge Luis Borges' story "Everything and Nothing," invests the world with a diversity of meanings but lacks one himself (Borges 1985). Privacy, he contends, is similarly amorphous with several connotations but no exact meaning (Solove 2006). Likening the world to a play is not new (Shakespeare 1603), but Borges' playwright was also bemoaning a lack of personal depth when compared to his literary characters. It is true privacy defies definition, but it certainly does not want for depth. There are several theoretical conceptions of privacy, some with rich philosophical and juridical histories. This article will briefly visit a few such conceptions before reviewing four contemporary elements of privacy in India that are influencing the evolution of privacy law.

Privacy in Everyday Life

Privacy expectations are commonplace. This is apparent from the diversity of contexts in which privacy claims are made. Privacy is most easily understood in relation to the body, where the law enforces social norms to protect against unwanted physical contact including assault, but does not criminalise staring. Recent controversies over the wearing of the hijab reveal conflicting expectations of privacy in relation to non-intimate personal features such as the face. In the 2014 case of *S A S* vs *France* (2014), the European Court of Human Rights (ECHR) found the hijab was not protected by the right to privacy to endorse demands for its removal in public places. Privacy is also widely claimed with respect to property. Notions of territorial privacy derive from classical liberalism and the protection traditionally given to homes and family life, which is discussed in more detail later. The castle doctrine—which was summarised by Edward Coke: "An Englishman's home is his castle"—demonstrates the common law's relatively early recognition of the inviolability of the home and the privacy of its residents.

The current global debate on the limits of surveillance deals with communications privacy which, according to some early cases in the United States (US), flowed from the protection given to property. Not all communications are protected. While the old English offence of eavesdropping punished the surreptitious listening of a private conversation in a general setting, current Indian law only protects telephonic, electronic and postal communications from unauthorised interceptions. The privacy of a person's location was recently in issue, when the Indian Penal Code (IPC) 1860 was amended to include the new offence of stalking in Section 354D. But locational privacy is impugned more by telephone and internet service providers as well as police investigation techniques such as cell tower triangulation and even handset-based global positioning system (GPS) tracking.

Data protection is another burgeoning field of law to regulate information privacy. Information that can result in the identification of a person, or "personal data," is strongly protected in Europe and the manner in which it can be collected, processed, stored, used or disclosed is heavily regulated. In contrast, Indian law offers very little protection against commercial or state uses of personal data. While direct marketing through telephones or email has received attention, the manner in which personal data has been commoditised, monetised and non-consensually shared has not. Privacy claims against the state have been raised in relation to the collection of biometric information for the issue of unique identity—"Aadhaar"—numbers.

The Meaning of Privacy

It is important to make a distinction between privacy, intimacy and secrecy since they are often wrongly conflated. What is intimate is private, but what is private need not be intimate (Gerstein 1978). For instance, the nature of a person's sexual relations is both intimate and private whereas information about that person's credit history may be private but is not intimate. Privacy and secrecy are also confused (Cohen 2010, Neocleous 2002). In everyday usage, secrecy usually conceals wrongdoing that may be, but is not necessarily illegal, such as an illicit extramarital affair (Posner 1979). On the other hand, in certain legal contexts imbued by state interests, secrecy restricts the disclosure of information that may affect the integrity, both real and imagined, of the nation state. Hence, while the intimate life of a minister may, with exceptions, be private, the deliberations of that minister during meetings of the cabinet are secret.

Once synthesised from its semantics and contexts, privacy appears to have three distinct meanings. First, privacy means spatial control. This meaning creates private spaces out of territory; but, while many such privacy expectations are socially negotiated, such as an imagined zone immediately surrounding our bodies, the law only protects these spaces when the territory is privately owned, such as a house (Lessig 2002, Goldring 1984, Litman 2000). Second, privacy means decisional autonomy. This protects personal choices that are intimate, such as a person's reproductive or contraceptive preferences, as well as choices that are played out in public, such as a person's faith or dress sense (Clark 1974). And, third, privacy connotes informational control. While the nature and limits of this control is debated, many laws seek to shield a certain vital amount of personal control over information from others (Westin 1967, Fried 1968).

Beate Rössler likens the meanings of privacy to the layers of an onion (2005). The centre of the onion, the innermost layer, she says, encompasses privacy of the body and other intimate interests. The second layer is compared to the classical liberal understanding of privacy that flows from the traditional public–private divide to protect the family and the home. And the third, outermost, layer of the onion describes economic structures or public civil society in opposition to the state, such as private corporations. This multilayered understanding of privacy appears to survive cultural differences (Zarrow 2012, Pow 2009).

Theoretical Conceptions

The primary conception of privacy flows from the classical liberal construction of the private sphere, based on the understanding that the home, the family, the place of worship, and other intimate spaces and relationships must be shielded from society and the state (McCloskey 1974, McCloskey 1980, De Bruin 2010). The private sphere competes with the public sphere—where private people gather to articulate the needs of society with the state, according to Jürgen Habermas—which invites state activity and regulation (1991). Liberal theorists from John Locke to John Rawls have reiterated the primacy of the family and the home in defining the private sphere and the privacy rights that arise therefrom (Locke 1689, Rawls 1971). But this traditional notion of the public–private divide is patriarchally encoded to presume heteronormative families led by men who solely populate the public sphere, confining women to the home and even shielding domestic violence against women with privacy (MacKinnon 1989, Gavison 1992, Allen 1988). Conceptions of privacy that emanate from the private sphere must survive this foundational critique of liberalism to be persuasive.

In 1890, Samuel Warren and Louis Brandeis built on classical liberal theory to argue a new conception of privacy, which they called the "right to be let alone" (Warren and Brandeis 1890), a phrase borrowed from Thomas Cooley (1888). The expansion of the press in England and the US had led to greater scrutiny of the lives of public figures without an equivalent

expansion of legal protection. Warren and Brandeis presented two central arguments. First, they proposed an extension of John Stuart Mill's "harm principle" (1859) to defend against the injury caused by prurient gossip and related invasions of privacy. English common law did not recognise a general tort of privacy, but it did offer the tort of nuisance as well as actions under the laws of defamation and confidence, which they found inadequate. Second, they argued intellectual property law failed to address the mental distress caused by unauthorised publication of personal information. In other words, they critiqued the failure of copyright law to treat the peace of mind of a person as a morally relevant quality, which is what classical liberalism sought to protect in the private sphere.

Warren and Brandeis said the essence of the right to be let alone was not private property but "inviolate personality," but they failed to offer a framework for enforcing this claim. By virtue of the principle of inviolate personality, was information about a person under her control? Yes, according to Alan Westin, who claimed that privacy is the ability of a person to control what information about her should be known to others (1967). This conception of privacy, as control over information, was shared by Charles Fried who pointed out that love, friendship and trust are conditional upon privacy (1968), thereby introducing social utility to the control theory. Julie Inness added nuance by stating that the imperative of control attaches with greater moral force to intimate information rather than impersonal information, bringing the privacy–intimacy distinction into focus once again (1991). However, this conception fails to explain what the control of information should be predicated on. It is a defining characteristic of property that a person who owns it may control it without encumbrance. But, is information about us our property (Moore 1998)?

David M O'Brien disagreed, and criticised the theoretical reduction of privacy to the single value of information control. Instead, he claimed privacy denoted "an existential condition of limited access to an individual's life experiences and engagements" (1979). This conception of privacy in terms of the inaccessibility of a person is improved upon by Ruth Gavison, who says privacy and accessibility are inversely proportional; hence, the greatest degree of privacy is attained when a person is completely inaccessible (1980). But, inaccessibility-based conceptions of privacy must be interrogated to survive two questions: is the sole inhabitant of an inaccessible place really more private than she is isolated (Schoeman 1984, Solove 2002); and, does a person who is confined to an inaccessible place against her will really enjoy more privacy than she suffers a loss of control (Westin 1967; O'Brien 1979)?

With regard to information privacy, perhaps the most convincing conception is proposed by Helen Nissenbaum who argues that privacy is the expectation that information about a person will be treated appropriately. This theory of "contextual integrity" believes people do not want to control their information or become inaccessible as much as they want their information to be treated in accordance with their expectations (Nissenbaum 2004, 2010, 2011). Since privacy suffers an embarrassment of meanings, its epistemological diversity is an asset, allowing different distillations of the norm to inform dissimilar claims.

Privacy and Press Freedom

An analysis of the debate regarding privacy in India reveals four types of privacy claims. The first claim relates to press freedom. According to Thomas Emerson, while privacy and a free press can coexist mostly in harmony, there are two potential areas of conflict: the first concerns the tort of privacy and the second the right to know (1979). The tort of privacy is an American creation; two of its components clash with the right to publish (Prosser 1960; Emerson 1979). These are cases of (i) embarrassing disclosure of private facts, and (ii) the public casting of a person in false light. Significant attention has been devoted to finding

the balance between privacy and press freedom in these cases.

With regard to embarrassing disclosures, some courts have tended to uphold invasive publications when deemed newsworthy, such as a US federal appeals court in *Virgil* vs *Time, Inc* (1975) which contrasts with the English cases of*Campbell* vs *Mirror Group Newspapers* (2004) and *Mosley* vs *News of the World* (2008) and the ECHR decision in *Von Hannover* vs *Germany*. In false light cases, courts have wavered between permitting and disciplining sensationalist but non-defamatory speech such as, for instance, the US Supreme Court judgment in *Time, Inc* vs *Hill*. Despite the Ohio Supreme Court's recognition of the false light tort in *Welling* vs *Weinfeld* 866 N E 2d 1051 (2007), there is a trend of reducing the scope of false light cases for impeding free speech, evidenced by the Florida Supreme Court judgment in*Anderson* vs *Gannett Company* 994 So 2d 1048 (2008).

However, several jurisdictions such as the United Kingdom (UK) and India do not recognise the tort of privacy. English courts have steadfastly refused to declare a tort of privacy, a position confirmed by the House of Lords in *Wainwright* vs*Home Office* (2003). In the absence of a privacy tort to protect against press intrusions, claimants have tried to imaginatively bend other legal principles to their will (Markesinis et al 2004). See for instance, *A* vs *B plc* (2003) and*Douglas* vs *Hello!* (2003) which argued the equitable remedy of confidence, and *Ellis* vs *Chief Constable Essex Police*(2003) which argued administrative law principles governing police powers.

This is not to suggest individuals are at the mercy of a mischievous press; on the contrary, the ease with which defamation claims are made with a view to silence the press, especially investigative journalism, is worrying (Dhavan 2008). Emerson identifies three interesting differences between defamation and privacy: (i) in defamation law truth is a defence, for privacy, truth is the grievance; (ii) defamation seeks to protect reputation, privacy protects peace of mind; and (iii) defamatory attacks on reputation can be publicly ameliorated, whereas public participation aggravates privacy injuries (1979).

In 1961, Lord Mancroft proposed the House of Lords codify a right to privacy to restrain invasive publications. The press could defend itself by proving the claimant was the subject of "reasonable public interest" for any of three reasons; namely, her occupation of a position of authority, her fame as a result of some achievement, or her insertion into the public eye due to a contemporary event1 (Neill 1962, Pratt 1979). In 1971, the Law Commission of India's 42nd report proposed to make a beginning for privacy law in India by legislating to prevent eavesdropping and unauthorised photography. This formula, adopted by the Indian Penal Code (Amendment) Bill in 1978, proposed a new chapter on privacy. However, it did not examine press freedom and eventually lapsed. In 1981, V N Gadgil of the Congress Party introduced a Right to Privacy Bill in the Lok Sabha, which was fortunately defeated. His motivation appeared to be the prevention of exposes of politicians, an effort he renewed in 1994 (Rahman 1994; Noorani 2011). The 1982 Second Press Commission chaired by Justice K K Mathew rejected Gadgil's bill, endorsed the lapsed proposals of 1978, proposed an extensive categorisation of matters that invited the public interest defence, and ceded the authority to judge improper privacy invasions to the Press Council of India (Government of India 1982).

Privacy and the right to know—often framed as the right to information from public sources—sometimes compete. But this tension is greater than the sum of its parts, for in the 1994 case of *R Rajagopal* vs *State of Tamil Nadu* (1994), the Supreme Court (SC) settled the law on the proposition that only the personal privacy of public officials, consisting of intimate actions and information, is protected. Discord occurs when privacy is claimed in lieu of a breach of confidence remedy which, in my view, is the basic flaw in Ratan Tata's ongoing

petition in the Supreme Court in respect of the government's unauthorised disclosure of Niira Radia's intercepted communications and their subsequent publication (*Ratan Tata* vs *Union of India* (2010). However, the "iniquity rule"—described by the maxim "there is no confidence as to the disclosure of iniquity"—would apply to protect the publication of confidential information that reveals culpability.

Privacy from State Surveillance

The second type of Indian privacy claim is in respect of state surveillance, both of property and communications. Liberal societies protect the privacy afforded by private property by requiring agents of the state to obtain warrants prior to entry. In the early 20th century, American courts went a step further to exclude from evidence anything seized from within private property in the absence of a search warrant (*Weeks* vs *United States*). The "exclusionary rule" strengthens privacy by discouraging illegal searches, and the "fruit of the poisonous tree" principle disqualifies evidence gathered with the assistance of illegally obtained evidence. These principles, which protect privacy rights through rules of criminal procedure and evidence, are at odds with English law, which is solely concerned with the relevance of the material, not its pedigree (*Kuruma, Son of Kaniu* vs *R* (1955). The English position was imported in *R M Malkani* vs *State of Maharashtra* (1973) following which Indian law permits illegally obtained evidence.

In 1928, the Supreme Court of the United States (SCOTUS) was asked in the case of *Olmstead* vs *United States* to extend the exclusionary rule to telephone conversations wiretapped without a warrant. In a close decision, with Justice Brandeis—the co-author of the 1890 article on the right to be let alone—dissenting, the court declined because the cables that carried the telephone conversation were not solely confined to private property. This facile reliance on the notion of private property was overruled in 1967 when people, not property, were declared to be the objects of privacy in*Katz* vs *United States*. In the 1996 case of *People's Union for Civil Liberties* (PUCL) vs *Union of India* (1997), the Indian Supreme Court declared telephone conversations were protected by a construction of privacy that flowed from the right to "personal liberty"—guaranteed by Article 21 of the Constitution, thereby triggering a 1978 judicial test requiring wiretaps to be conducted under a just, fair and reasonable law of Parliament (*Maneka Gandhi* vs *Union of India* (1978)).

However, India's past jurisprudence of surveillance regulation is sketchy. In the 1962 case of *Kharak Singh* vs *State of Uttar Pradesh* (1964), the first surveillance-related constitutional privacy claim was mostly rejected by the Supreme Court when the majority refused to locate privacy in "personal liberty"; however, they did prohibit warrantless entry into the houses of "history-sheeters." Justice Subba Rao famously dissented, finding privacy constituted the essence of "personal liberty" and surveillance had a chilling effect on free expression. In *Gobind* vs *State of Madhya Pradesh* (1975), profiting from the evolution of new American privacy jurisprudence in the intervening years, the court leaned towards, but ultimately held short of, recognising a constitutional right to privacy. The court found if the right to privacy did exist in India, it was subject to the test of "compelling state interest" from which it did not emerge intact.

This scepticism has aided the perpetuation of a relatively stringent communications surveillance regime. The interception provisions of the Telegraph Act 1885 in Section 5(2) and its close cousin the Post Office Act 1898 in Section 26 were enacted to bolster colonial control over a subjugated nation, and were disparaged by P Ananda Charlu and Bishamber Nath who were Indian members of the Imperial Legislative Council.2 After independence, despite the Law Commission of India's 38th report suggesting in 1968 the reading down of the interception

provisions for travelling beyond the pale of constitutionality, the Supreme Court cursorily tested the interception provisions against the right to free speech in the 1996 PUCL case and found they survived. In 2008, similar provisions were included through Sections 69 and 69B of the Information Technology Act 2000 to enable the interception and monitoring of electronic communications. Alarmingly, in the appeal of *State* vs *Navjot Sandhu* (2005) concerning the 2001 attacks on the Indian Parliament, the Supreme Court permitted wiretapped evidence illegally obtained outside the boundaries of these already severe laws, a move likely to embolden the police into greater illegal invasions of privacy.

Privacy as Decisional Autonomy

The third privacy claim is in relation to decisional autonomy, and is founded on the belief that privacy is an essential constituent of liberty, the deprivation of which prevents people from making fundamental choices about themselves. Such a conception of privacy has flourished in the US where the national polity is marked by a greater expectation of individual sovereignty against the impositions of society and the state (Lane 2009). The SCOTUS enforced this account of privacy in two landmark decisions in 1965 and 1973. In the former case of *Griswold* vs *Connecticut*, the court struck down a law that criminalised birth control for violating the inherent privacy of marriage. The majority declared couples had a right to privacy that protected their choices regarding contraception, and this right emanated from the "penumbras" of the other rights in the US Bill of Rights, which together created a "zone of privacy." In the latter case of *Roe* vs *Wade*—more controversial for its subject matter: abortion—the court upheld a woman's decisional autonomy to terminate her pregnancy afforded by the right to privacy, but located this right firmly in the constitutional guarantee of "personal liberty," not amongst the penumbras of other rights.

However, decisional autonomy cases have been inconsistent. In *Bowers* vs *Hardwick* in 1986, the SCOTUS failed to protect private and consensual adult homosexual sex based on an unsound heteronormative application of the classical public–private divide. Dissenting judge Harry Blackmun, who had delivered the primary judgment in *Roe*, condemned the majority's "wilful blindness" to the privacy interests of gay people. In 2003, *Bowers* was overruled by *Lawrence* vs *Texas*which returned the privacy of sexual choice to an expanded interpretation of "personal liberty" in the Bill of Rights. Ironically, while Indian privacy jurisprudence borrows the idiom of personal liberty, it has only applied it with limited success in surveillance-related cases—*Kharak Singh*, *Gobind* and PUCL—where the privacy interests in homes or communications are obvious and bear no relation to decisional autonomy. The sole attempt to enforce decisional autonomy flowing from a right to privacy emanating from the constitutional guarantee of "personal liberty" was made by the Delhi High Court in *Naz Foundation* vs *Government of* NCT *Delhi* (2009), but was unconvincingly—in my view wrongly—overturned on appeal by the Supreme Court in *Suresh Koushal* vs *Naz Foundation* (2014) 1 SCC 1.

These and other failures suggest Indian privacy law has not matured to protect individual sovereignty, especially against the depredations of society and the state, which purport to enforce the morals of the community. For instance, there are currently concerted legislative and judicial attempts to prohibit an individual's right to privately view obscene content (*Kamlesh Vaswani* vs *Union of India* (2013), a freedom long upheld elsewhere under an implied right of privacy, such as in the US case of *Stanley* vs *Georgia*. In a similar vein, banning the private consumption of certain foods on grounds unrelated to safety, for instance the bans of beef and pork, negates the decisional autonomy of an individual's private right to eat. Although this claim has not been successfully advanced in India yet, it is being argued in the Bombay High Court in *Haresh Jagtiani* vs *State of Maharashtra* (2015).

Information Privacy

The fourth and final privacy claim, which is relatively recent in India, is made in relation to personal information. Personal information is that which can cause the identification of a person, whether used directly or in conjunction with other information. Personal information is required by the state to provide governance and is sought by commercial entities, both public and private, in order to provide goods and services. Information privacy law seeks to regulate the collection, use, storage, disclosure and destruction of personal information in order to protect the agency and expectations of the individuals to whom that information pertains.

State authorities have long collected personal information for the general purpose of governance, such as the decadal Census of India; or to issue identification documents, the production of which are a condition precedent to access many services and freedoms, such as ration cards, driver's licences, passports, electoral photo identity cards, and others. The latter documents serve the unwritten dual purpose of establishing identity in everyday life. State collections of personal information went unopposed for decades before the creation of the Aadhaar scheme in early 2009 to collect and store biometric information of all people resident in India. The Aadhaar scheme is consensual, no forcible collection of biometric information is provided for; and, the Supreme Court has temporarily disallowed condition precedential demands for Aadhaar cards to access government services in two orders of 23 September 2013 and 16 March 2015 in *Justice K S Puttaswamy* vs *Union of India* (2012). Nevertheless, privacy concerns regarding the security of the centralised database and the sharing of personal information remain, in addition to serious procedural infirmities stemming from the absence of an enabling statute (Greenleaf 2010).

On the other hand, a 2004 amendment to the Citizenship Act, 1955 permits the compulsory registration of citizens to enable the creation of the National Population Register (NPR), which also seeks biometric information, namely fingerprints and iris recognition scans. The NPR is the first countrywide biometric information collection effort, but there have long existed provisions in Indian criminal law to permit the forcible collection of fingerprints for forensic uses in certain cases. Section 73 of the Indian Evidence Act, 1872 permits such a collection of fingerprints, as does the Identification of Prisoners Act, 1920 which was further amended by Tamil Nadu in 2010 to enable the collection of blood samples. Indeed it is a common practice in most countries to forcibly collect fingerprints during the criminal justice process; therefore privacy interests demand the conditions that trigger forcible collection are reasonable to safeguard against capricious or arbitrary exercises of power.

Commercial collections of personal information have been largely unregulated in India despite the advance of information privacy law in Europe and other parts of the world. With the expansion of India's data processing industry, fuelled in large part by incoming personal information from Europe, pressure mounted on India to introduce legislation to comply with the outsourcing requirements of European privacy law (Greenleaf 2011a). In 2010, a European-commissioned assessment of Indian data privacy laws revealed large gaps in protective coverage to necessitate corrective action (Greenleaf 2011b). This remediation was dual: on the one hand the Department of Information Technology (DEITY) in the Ministry of Communications issued rules to institute a basic data protection regime (the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011), and on the other hand the Department of Personnel and Training (DoPT) in the Ministry of Personnel, Public Grievances and Pensions began drafting a comprehensive privacy bill.

The anomaly of two ministries in the same government attempting to make law on the same field

appears to have been lost on observers. Law ought to be clear, but DEITY's rules were carelessly drafted prompting the department to issue a press clarification a few months later which in turn was dubious since law cannot be made or interpreted by press releases. In parallel, one year earlier, the DoPT had issued a white paper for privacy legislation where it counter-intuitively claimed: "India is not a particularly private nation" (Department of Personnel and Training 2010). Inchoate claims of this nature suggest tension between communitarian values and individual rights (Etzioni 1999, Etzioni 2000, Walzer 1990); they strike at the heart of the liberal construction of the citizen as an autonomous rights-bearer free from the impositions of society and the state. Nevertheless, the resultant draft privacy bill was considered by a Committee of Secretaries in May 2011 whereupon it was returned to the DoPT for substantial modifications. The latest avatar of the bill has not been publicly released for comments yet, so a discussion of its merits would be premature.

Future Tense

If they receive sustained legislative or judicial attention, these four categories of privacy claims could form the basis for the creation of a coherent corpus of Indian privacy law. Such a law need not be omnibus, as the DoPT's first draft bill was in 2011. Indeed, the multiplicity of privacy claims, the diversity of the attendant legal principles, and the various challenges of enforcement would muddy the waters of any possible omnibus legislation. In the first place, there is a difference between the *in rem* public right to privacy against society and the state and the private "bundle of rights" afforded in tort law and by actionable claims (Dhavan 1979). This fundamental distinction has been blurred on several occasions, including by the Supreme Court in *R Rajagopal*, to warrant a clear demarcation in future law. Further, the technical and commercial expertise required to regulate data protection bears little relation to the constitutional, criminal and administrative law concerns that govern surveillance, free speech or decisional autonomy. For these and other reasons it is best if the individual constituents of Indian privacy law are left to mature in their silos.

However, there is a larger dissonance in Indian privacy jurisprudence that requires resolution before actual progress can be achieved. This is twofold. On the one hand, past privacy case law has failed to achieve theoretical clarity, and as a result a jumble of contending concepts confuses the law instead of substantiating it. For instance, in the *Gobind* case, which dealt with the limits of police surveillance on private property, the Supreme Court devoted most of its judgment to studying the emerging American ideal of decisional autonomy, which is chiefly concerned with protecting intangible choices rather than property. Yet, after having approved decisional autonomy, the Court abjectly failed to apply it when legitimately called upon to do so in the *Suresh Koushal* case. To use a litigator's yardstick, there is no test for privacy; no Indian judge has fashioned a judicial model of privacy that is logical, predictable, and supported by reason, not even the inimitable Justice Subba Rao whose contribution to privacy law continues to tower over the field.

On the other hand, as long as India's law and polity remain ambivalent about the rights of the individual against the community, privacy law will suffer. By whatever term the law employs to describe the undefined claims of the community—public interest, public morality, public order, or national security—the price of frequently privileging these claims over the freedoms of the individual is the loss of privacy. Since government policy has historically favoured homogenised notions of state interest and public order that imagine no space for privacy, an unwavering stand in favour of individual freedoms and privacy from interference by the community and state must be judicially taken by the constitutional courts

Comparing Census and NSS Data on Employment and Unemployment(epw,Fodder for GS)

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The census and National Sample Survey both provide employment and unemployment data. This article identifies broadly comparable indicators of employment, underemployment and unemployment from the two data sets and finds that Census 2011 estimates of unemployment are far higher than those of the NSS 68th round. This article suggests this is so because the census unemployment estimates also include students and women primarily engaged in domestic duties who are seeking work.

Silk Routes versus Sea Lanes The Return of Landlubbers(IR,Economics,epw)

Download PDF version

The Chinese strategy is to build rail and road links over the Eurasian landmass to escape the vice-like grip over maritime trade routes exercised by the United States and its allies. An exploration of the possible consequences, drawing on history, for China, the Western powers, India and the global trade and military architecture.

Atul Bhardwaj (atul.beret@gmail.com) is ICSSR Senior Fellow at the Institute of Chinese Studies, Delhi.

Grapes from Astana can reach Amritsar in just 28 hours by train through Pakistan—a fact recently reinforced by an economist from Tajikistan1 in his talk about land routes connecting Central Asia to India. A few years ago, the idea itself would have been relegated as

impractical to a mind conditioned to think of international trade as synonymous with ships and sea lanes of communication (SLOC). Until, of course, the Chinese proposed their signature idea of “One-Belt-One-Road” (OBOR) which is fast gaining currency.

For long, the Chinese story was devoid of ideas that could develop an emotional rapport with the world. OBOR has injected a new dimension to the Chinese growth narrative. The primary aim of OBOR is to connect China with Europe through Central Asia and Russia. The purpose is to limit the maritime component in the global supply chain and thereby reduce dependence on the international merchant fleet of bulk carriers and tankers.

Beijing understands that making Southeast Asia the world’s factory and building international financial infrastructure like the Asian Infrastructure Investment Bank (AIIB) are not adequate to lead the global economy, what is equally important is control over the channels through which business travels.

Rediscovering Land

On 9 December 2014, a cargo train which started its journey from the manufacturing hub of Yiwu (close to Shanghai) reached the Spanish city of Madrid covering about 8,000 miles. The world’s longest rail journey passed through China, Kazakhstan, Russia, Belarus, Poland, Germany and France. It took 21 days to complete this maiden journey, less than half the time it takes to travel by sea. According to freight experts (Ian 2014),

sending a 10-tonne 40-foot container from Chengdu, China, to Lodz, Poland, takes 12 to 14 days by train, compared to several days by plane (if you include customs and delivery on each end) and some six weeks or longer by boat. The price tag comes to some $40,000 by air, compared to $10,000 by train, and as low as $5,000 by boat.

As the length of the train increases and more powerful engines are added, time and costs are likely to fall considerably. Several other Chinese manufacturing centres are already connected to the German cities of Hamburg and Duisburg and to Rotterdam in the Netherlands. This time–space compression is ushering in a new phase of globalisation that promises to be more inclusive than the previous ones.

OBOR is not purely land based; it also has a maritime component. The ports and harbours in Indonesia, Africa, Myanmar, Bangladesh, Pakistan, Sri Lanka and possibly India are part of the scheme to shorten sea time that the to-and-fro trade from West Asia and Africa has to traverse to reach China. This ensures that China-bound oil first lands at Gwadar port in Pakistan or at Kyaukphyu port in Myanmar, from where it is carried through tankers, pipelines and rail network to western China, thus opening up new vistas to create wealth for populations all along routes that have remained backward for centuries.

Generally, ocean trade between two ports bypasses many nations along the passage. For example, oil coming from West Asia to China using the conventional SLOCs is largely a bilateral transaction that benefits few littorals en route. OBOR, backed by $140 billion funds, is creating a comprehensive network of ports, railways and roads that would open up new business synergies all along the route.

The question is, why is China diversifying trade routes? Why cannot the Chinese continue to use the well-established SLOCs? If their goods can easily ply on relatively peaceful high seas then why do they want to move them through well-populated national territories? Why are the Chinese increasing their vulnerabilities by increasing the number of stakeholders along the proposed trade routes? One plausible answer is that Chinese trade does not feel safe using American-dominated SLOCs. An economic reason could be the desire to garner a greater share in

the global service sector that is currently under American dominance.

Reopening the old silk route is an open defiance of the American "command of the commons." Commanding the commons entails controlling the $375 billion shipping industry and the shipping insurance and reinsurance business, that includes vessel hull, war risk and cargo insurance premiums. This business has been the bedrock of the Western dominance of the world. The Chinese challenge is non-confrontationist, to the extent that it does not involve naval battles to physically dethrone the United States (US) from the command.

This raises an obvious question, if China is turning its back on the oceans then why is it investing in building a blue water navy? The Chinese are building more surface ships than submarines because they see medium navies as a diplomatic force that is used more for advancing flag showing than fighting wars. According to media reports, China plans to have 351 ships by 2020 and every year it is building or launching roughly 60 naval ships. The Chinese are building warships merely as a show of capability much in the same fashion as the US had built a large cruiser in 1925, merely to puncture British naval vanity. Another reason seems to be to induce America to spend more on its navy.

The Chinese also do not seem to want to meddle with the well-protected Anglo–American insurance markets. The Chinese strategy hinges on bringing down the usage of oceans for trade. Once trains and road links become extensive, global trade will not employ 55,000 ships to move cargo. Lower volumes will lead to a sharp fall in the revenue generated from insurance and reinsurance premiums that accrue to the Western world and also have an impact on the derivatives market at the London-based Baltic Exchange. Reduced trade through oceans will automatically lead to decline in the importance of Western navies. This would hit the maritime nations hard. The pain will aggravate when Chinese capital creates more favourable insurance and reinsurance regimes and fragments the market along the new trade routes that it is creating.

Exporting Development Models

Many analysts have compared OBOR investments with the $17 billion Marshall Plan that the US had executed for Western Europe in the aftermath of World War II. However, the two are fundamentally different because the historical context in which the Marshall Plan was conceived is totally at variance with circumstances in which OBOR is germinating. The former was a by-product of war and a superpower's geostrategic game to contain the Soviet footprint in Europe by giving a fillip to Western war-devastated economies. On the other hand, OBOR is promoted by China, which is not yet a superpower and is not using war surpluses to catapult itself to a hegemonic position. The Chinese initiative is more towards creating a multipolar world by breaking the Anglo–Saxon vice-like grip over global trade.

When America was at the stage where China is today, they talked about the need for political reform in the world. Promoting anti-colonialism and cultural nationalism in the 1940s, established America on a moral high ground. The only tangible economic model of development that depression-ravaged America gave to the world was the Tennessee Valley Authority (TVA). TVA, a multipurpose river valley development project, introduced new techniques in flood control and exploitation of vast water resources for electricity generation. It was a mixed economy model that helped "restructure capitalism through Keynesian inspired state-directed planning," (D'Souza 2003: 86). It gave fresh impetus to industrialisation and dams became "symbols of modernisation, national prestige and of human dominance over nature" (Baghel and Nüsser 2010: 233). David E Lilienthal's book TVA*: Democracy on the March* was used to romanticise the concept and project it as an example of "grass-roots democracy."

In a matter of few years the idea of TVA reached India in the form of the Damodar Valley project. Its Chinese version was called the Yangtze Valley Authority (YVA) under Chiang Kai-shek. However, unlike OBOR, TVA was devoid of capital and all that the idea brought with it was American experts and multinational companies to draw money out from former colonies.

The twin factor that differentiates China's rise from that of the US is the role that the American military and private capital played in influencing the contours of the postcolonial order. America emerged on the global stage after two bloody wars. The entire post-war planned development and industrialisation model that America introduced to the world was designed to cater to the war industry. Therefore, the American military–industrial complex played a massive role in shaping the post-war world order. Currently, the Chinese government has kept its Peoples' Liberation Army and its billionaires, who control 3% of Chinese wealth, on a tight leash.

When Britannica Ruled the Waves

To understand the nuances of the critical changes that China is introducing to the international political economy, one needs to peep into history; the way the British closed traditional land routes and introduced the notion of "landlocked" in transnational exchanges. As Nimmi Kurian argues in *India-China Borderlands* (2014: 30), the British security establishment created the concept of "buffer zones" on borders that "flew in the face of both economic logic and social reality."

China, a continental power in Asia, was dissuaded from using the Silk Road and forced to open its ports through a series of "Opium Wars" and the invasion of Tibet. China resisted but eventually relented due to domestic strife created by the decline in trade. For the British it was essential to use their navy to make ocean routes more attractive, because since the 18th century "navy and credit" had been the bulwark of their global reach (Kennedy 1981: 46). By the middle of the 19th century, the British lost monopoly over manufacturing with the rise of Germany, the US and Russia. In 1870 the United Kingdom (UK) contained 32% of the world's manufacturing capacity; this share was down to 15% by 1910 (Kennedy 1981: 47).

Undeterred by changed circumstances, the English used their capital to underwrite the ocean trade. They encouraged free trade and earned money by extending services like shipping, insurance, commodity-dealing, banking. By 1914 they had reached a stage where the Lloyds of London provided insurance cover to German merchantmen that were sunk by Royal Navy guns. The fall in international trade in the wake of the Great Depression of 1929 led to a fall in British annual earnings from shipping, commissions, insurance and overseas investments; they fell by some £250 billion (Kennedy: 53).

America is palpably perturbed by the development of the AIIB and the OBOR. These twin Chinese creations are likely to do to America what the two world wars and the Great Depression had done to Britain. These could reduce their share of global service trade, which currently is double that of China (Romei 2014). The reduced shipment of oil from West Asia to America due to the shale gas revolution and the growth in renewable energy avenues coupled with new trade routes will cause a severe dent in American revenues. It is for this reason that America is mobilising its allies to refrain from joining Chinese-led initiatives.

One wonders what America will do to stem the slide. Will America go to war, relying on the money and goodwill of its allies? The UK also entered the World War II on borrowed money–both India and the US extensively lent money and equipment to the UK to fight the War; which it won but Britain was bankrupted. Will India be the American ally in a misadventure that takes on China?

India's Stakes

It is indeed hard to understand the logic behind some analysts who are insisting that border security and settlement with China should take precedence over economic ties. In effect these analysts are suggesting that India should refrain from joining the OBOR initiative. In fact, it would be more relevant for India to first figure out what she stands to gain by sustaining the primacy of sea lanes of communication in global trade. Collectively, India neither has much stake in marine insurance and reinsurance industry nor is it a global shipbuilding hub that is likely to lose business due to opening up of land routes.

Unlike the British military officers, who raised the bogey of border disputes in order to close land routes and direct trade to the oceans, the India of the 21st century has no such commercial strategic objective to meet. Despite proximity to seas and a reasonably strong navy, India does not enjoy much leverage to guide ocean trade markets. Therefore, it is prudent for India to join the unlocking of borders, and seek fresh avenues to do business in an environment that is relatively free of its erstwhile colonial masters and their cohorts. It is in the interest of multipolarity that sea lanes are subjected to some competition by the land lanes.

India's Killer Heat Waves(epw, Fodder for GS and Essay)

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Heat waves do not kill, poverty and governmental apathy do.

The heat waves in Andhra Pradesh, Gujarat, Odisha, Telangana and other states have killed over 1,200 people so far. The poultry industry in Telangana and Andhra Pradesh has reported high bird mortality and losses amounting to over Rs 100 crore until mid-May. As the disaster management authorities have admitted it is the poor, the ill and the old—the most vulnerable—who are the worst affected. In such circumstances, it is rather odd and verging on mockery for the authorities to urge people to stay indoors for several hours, drink plenty of water (and buttermilk), wear only cotton clothes and so on. Just how are daily wage labourers, drivers of non-air-conditioned vehicles, delivery services' personnel, workers in industrial units where high temperatures are a constant, the homeless and the destitute to follow this "well-intentioned" advice? To add to the heat waves, power outages and breakdowns are such a common feature in so many parts of the country that staying indoors hardly helps. Some health experts have even called for the declaration of a national disaster given the high death toll (this number only reflects the reported deaths). Instead of bland and useless instructions, what is needed are well-coordinated measures that range from the preventive to the curative.

The lack of such measures is all the more reprehensible because this is not the first time that India is witnessing deaths due to heat waves. The heat waves in 2003 in Andhra Pradesh, in 1998 in Odisha and the 2010 heat wave which was a global phenomenon and affected Ahmedabad

badly took thousands of lives. While these years saw exceptionally high fatalities, almost every year the heat waves kill people all over the country, even if in smaller numbers.

What is notable about this phenomenon is that in developing countries its impact tends to be much more severe due to a range of contributory factors like poverty, inequality, lack of public infrastructure and an inability of public bodies to address the symptoms. Added to this there are issues of poor sanitation and a larger disease load for the majority of the population. For people who are unable to get enough nutrition, cannot access medicines and doctors, are without shelter and are unaware of government schemes, the heat spikes lead to spikes in morbidity and mortality.

The city of Ahmedabad and its municipal corporation have been hailed for being the only one in the country to design an action plan and implement it from 2013 onwards. The plan was drawn up by the Ahmedabad Municipal Corporation, the Indian Institute of Public Health, the Natural Resources Defense Council and the Georgia Institute of Technology, last two of the United States. It involves disseminating public information about risks and mitigating measures, using social media, establishing a warning system including what-to-do measures for governmental agencies, training of health professionals to respond quickly and effectively, and adapting the city's infrastructure to deal with extreme temperatures. Odisha too has been conducting an awareness-raising campaign as part of its disaster risk management programme on preventive and curative steps to be taken during heat waves. Some of these successful measures should have been adopted by other cities and state administrations. What stops them?

Perhaps the first step must be the recognition of heat waves as a disaster that affects public health. In 2013, the National Disaster Management Authority had written to the Prime Minister of the need to include heat waves in the list of natural disasters. However, the group of ministers entrusted with the task of taking a decision on the matter did not reach any conclusion. Apart from this, coordination of different government agencies—the most critical aspect of implementation that seems to be a perennially problematic area—is another urgent feature. Studies specifically designed for Indian cities and towns that are dedicated to looking at the impact of heat waves and other data collection measures ought also to receive serious attention. For the long term, the problems related to increasing and haphazard urbanisation, industrial and vehicular pollution and the lack of housing will also need to be the focus of attention. Work schedules, particularly in work which involves physical labour, also need to be changed so that afternoons are kept work free.

We are living in the times of climate change. Some of these intense heat waves are expected to increase in their intensity and spread. We need adaptation measures which address not only the long-term pattern of intense summer heat, which has been a "traditional" killer of the poor and destitute, but also keep in mind the unexpected manner in which these heat waves will come and go. It is a tall task and one which seems herculean for our callous and inept governments. The (lack of) importance given to these issues and the (ab)sense of urgency brought to bear on them can be read to be commensurate with the value placed on the life of the poor, working-class Indian.

Scanning kidneys becomes easy(Sci-tech,Health ,

Preliminary results have been published recently in the 2014 IEEE 16th International Conference on e-Health Networking, Applications and Services

Thanks to software developed by IIT Hyderabad researchers, semi-skilled persons can use an ultrasound imaging device to perform preliminary diagnosis to classify a kidney as either normal or abnormal in terms of stones, cysts, or bacterial infection. When fully functional, the imaging system developed by a team led by Prof. P. Rajalakshmi, Department of Electrical Engineering, IIT Hyderabad can provide a fillip to healthcare in rural and remote areas where lack of trained sonologists has become a norm.

Preliminary results have been published recently in the 2014 IEEE 16th International Conference on e-Health Networking, Applications and Services (Healthcom).

Unlike in the case of the sphygmomanometer (blood pressure measuring instrument) or ECG, only skilled people can use an ultrasound probe to get the desired information. The very objective of Prof. Rajalakshmi's work was therefore to turn the device into one that can be operated by semi-skilled people.

To do that, a six-second ultrasound video is converted into images – 15 frames per second. An organ validation algorithm developed by the team then checks each frame to see if useful information has been acquired. The algorithm was developed based on ultrasound videos of kidney collected by sonographers. "The system alerts the operator to rescan the organ when partial data or useful data is not available," she said. "We have developed a novel organ validation algorithm for kidney but it can be expanded to other organs too."

Once the organ validation is performed, a CAD algorithm does a preliminary diagnosis to classify the kidney as normal or abnormal. "The length of the kidney, the textural features and first and second order statistics are applied to classify a kidney as normal or abnormal," said Prof. Rajalakshmi. The abnormality could be a stone, a cyst or bacterial infection. The algorithm only classifies the organ as normal or abnormal and does not say what the abnormality is.

Though 32 features extracted come under the first and second order statistics, the team found kidney classification can be based on fewer features. "Our analysis shows that only 10 features are needed to classify a kidney as normal or not," she said.

The valid images are uploaded to the cloud and information on whether the kidney image is normal or not is also tagged along with the image.

The good news is that the organ validation algorithm and CAD can be integrated with ultrasound machines.
Keywords: 2014 IEEE 16th International Conference, e-Health Networking

The silent killer(Health, Essay,HIndu)

As yet another World No Tobacco Day rolls by on May 31, more people are getting hooked at a younger age, and risking cancer for that illusory high.

“My tooth was aching on and off for a year, so I used to take painkillers and keep working,” says Murugan*. “When I went to get it extracted, the dentist in Ariyalur asked to me to get tested for oral cancer. I didn’t know chewing tobacco was so harmful,” the former mason says, eyes welling up as he lisps painfully through a mouth disfigured by cancer.

At another ward in the same city cancer hospital in Tiruchi, the wife of a newly diagnosed lymphoma patient relates a similar story.

“My husband used to work in the Electricity Board, and then took up farming in Thuraiyur after retirement. He started chewing tobacco just for the heck of it two years ago. For the past four months, he had been complaining of toothache. When we went to the dentist, we were asked to come to this hospital,” she says. What makes this patient’s situation more precarious is that he has also tested positive for Aids.

As yet another World No Tobacco Day gets marked on May 31 by the World Health Organisation (WHO), the numbers of those addicted to the leaf continue to assume alarming proportions.

Usually, tobacco use is combined with alcoholism or recreational drug abuse.

A study in the journal *Addiction* in mid-May found that more than 1 billion of the world’s adult population smokes tobacco, and almost 240 million people have an alcohol use disorder.

This week, *The Global Burden of Cancer 2013* study published in *JAMA Oncology* reported that the number of new mouth cancer cases in India more than doubled between 1990 and 2013 from 55,480 to 127,168, mostly due to chewing tobacco.

Lethal effects

“We are seeing more of the young lower middle-income group workers, construction workers, masons and market loadmen, who are engaged in hard physical labour, addicted to a smokeless variety of tobacco that they make into a paste, and keep inside the lip. They don’t chew it, but the essence that it produces erodes the area. Chronic (repeated) use produces ulcers which becomes a cancer,” says Dr. K. Govindaraj, Director, G. Viswanathan Speciality Hospitals.

Patients with oral malignancies caused by smokeless tobacco (that which is not burned before or at the time of consumption), are usually the last to discover that their socalled safe and cheap alternative to cigarettes or bidis is actually as lethal a killer.

“The difference between smokeless tobacco and cigarettes is the point of contact,” says Dr. Govindaraj.

The abrasive juice of smokeless tobacco wears down the mucosa layer of the lip and gum area, making it vulnerable to oral cancer. Smoking a cigarette, on the other hand, can cause at least 14 types of cancer, starting with the larynx (voice box), oesophagus (food pipe), mouth and pharynx (throat), bladder, pancreas, kidney, liver, stomach, bowel, cervix, ovary, nose and sinuses and some types of leukaemia.

Strong drug

So why do people get hooked to tobacco? When asked about his habit, Murugan, the mason says, “I used to keep a wad of tobacco in my cheek and go to work in the morning. I didn’t feel hungry or tired, and could work for long periods.”

The real reason is that tobacco has a strong drug called nicotine whose effects are as powerful as ‘hard’ narcotics like heroin or cocaine. “Initially when people start smoking, they don’t really like it,” says Dr. Govindaraj. “Over time, out of peer pressure and habit, they start liking the smoke and inhaling all of it. It gets into the common area of the food pipe and the windpipe. From there it is being sucked into the lungs,” he adds, describing the process that essentially has coal tar being systematically dumped into the body. It takes less than 20 seconds to get a nicotine hit by inhaling cigarette smoke.

Addiction issues

The growing tobacco dependence has proved to be a major challenge for the healthcare sector, and rehabilitation workers especially in Tier II cities like Tiruchi. “Smoking is usually one in a big combination of problems,” says T. Leela Thiagarajan, Honorary Supervisor, Sigaram Social Service Trust. Associated with the de-addiction and rescue centre since 2008, Ms. Leela has helped 3,500 people to get rehabilitated through its 21-day counselling sessions, but she admits that only 2,500 of them could be expected to stay clear of alcohol, drugs and tobacco forever.

“Addiction issues are starting commonly from age of 13 years in Tiruchi,” she says. “We get a lot of complaints from teachers that students are drunk or using paan masala and not paying attention in class.”

Of late, growing numbers of women, especially those who work as domestic servants, have been approaching the centre for counselling to kick their tobacco habit, she says. “They come to us because they realise that the tobacco juice is causing uterine problems and hampering pregnancy. One mother confessed she wanted to stop because she had seen her daughter chewing tobacco just like her.”

Gender has nothing to do with tobacco use, agrees Dr. Govindaraj. “Parents of girl children can’t just close their eyes and say that only boys smoke. We have to educate the male and female child very early on,” he says.

Warnings

That task is made more difficult when smoking and tobacco products already have a firm grip on public imagination. Cinema's use of cigarette/cigar smoking (accompanied by an alcoholic drink) as a scene setter or a character indicator of heroism or villainy is a well-entrenched trope. Running a fine-print warning each time such scenes appear on screen is hardly going to make a difference.

"Statutory warnings and counselling are not enough. It depends on the addict to quit," says Ms. Leela.

"Many countries in the West have replaced the brand name of the cigarette with graphic warning pictures of mouth ulcers, lung cancer ulcers, infertility, premature death of the baby, and so on," says Dr. Govindaraj.

The best way to avoid falling prey to tobacco would be an exposure to its ill-effects, he suggests.

"If every school takes its senior-level students to hospitals that treat oral malignancies, they will not touch smoking at all. In fact, even if adult smokers can see 10 such cases, they will stop smoking," says Dr. Govindaraj.

"It is so gruesome when you see people with lips and cheeks eroded due to tobacco use. You can also see flesh-eating maggots on the affected parts, and the smell is so foul that even medical professionals have difficulty in bearing it. There is nothing glamorous about tobacco."

Keywords: Tobacco, World No Tobacco Day, May 31, cigarrette, nicotine, lethal, addiction, smoking, cancer, recreational drug abuse