

glass had shattered. Axles had broken, wheels had played at odd angles; and sometimes trucks, like vulnerable, soft-bellied animals, had turned upside-down below their cruel loads, showing the wretchedness and rustiness of their metal underbellies and the smoothness of their recapped tires." (p. 150)

One might also have read the equally high-profile A Goddess in the Stones (Holt, New York, 1991), by the eminent British writer Norman Lewis, who rode on part of the GT down in Bihar, the state bordering Uttar Pradesh (Agra's state, in which the March 27, 1996 accident took place). Someone wondering about road safety might have been struck by Lewis's description of a head-on collision of two trucks at high speed, "exploding and scattering cargoes, demolished bodies, engines, axles, and wheels all over the road." Lewis goes on to cite another case in which "an eight-wheel leviathan had impaled a small house and charged with it into a field."

5) Brian Paul Bach, in The Grand Trunk Road (HarperCollins, India, 1993) notes, "Wrecks on the GTR are a whole lurid subculture of their own... Yes, we all realise that we could very well perish on this thoroughfare... " He then quotes Khushwant Singh, the patriarch of Indian journalists, who tells him, "It is a mad road, now." Bach adds, "More than a few of his family relations have perished on its unyielding kilometres."

VII. Magazine Information about the GT Road's Safety

To cite the most prominent magazine articles first: anyone

planning to travel even in daylight on any Indian road, and specifically the GT, might have noticed the feature article in the Smithsonian (May, 1992) -- an eloquent photo essay primarily devoted to the wrecked trucks of the Grand Trunk Road. He could not have missed the images of the road flooded by monsoon rains, or of "the many overturned trucks that pushed the envelope too far," or the dangerously overloaded passenger buses, or a line of camels monopolizing the shoulder of the road, or of how "the choking dust hangs over a stretch in a perpetual state of repair" (to quote from the photo captions).

Had they read the accompanying Smithsonian article, headlined **There's no stretch of highway as wild as India's Grand Trunk Road**, the following lines might've leapt out: "Driving -- or even walking alongside -- the Grand Trunk Road... is not for the faint of heart. Imagine a macadam track... barely two lanes wide with no markings on most stretches... By day, there's the constant threat of collision; by night, armed robbers scatter nails or block the road with rocks... The few foreigners who experience the GT often do so from the backseat of a wildly weaving [car], but the driver can't hear their gasps over the honking."

The Steve Coll essay mentioned in the previous section was also reprinted, in highly abbreviated form, in the July/August 1994 issue of Mother Jones magazine. It still made clear the many dangers of the Grand Trunk Road.

The May 1990 issue of National Geographic contained a full-

length article on the Grand Trunk Road. Along with the customary images of overturned trucks and the motley array of traffic, there was an aerial view of the road, clearly showing the extent to which the traffic ignored the lanes and the proper direction of each lane. There was a photo of army officers searching bus passengers for weapons. There was a photo of men and women crushing gravel to spread on the road's surface before tar could be manually poured over it; most Indian road maintenance is still done by hand. Another photo showed Indians riding the road four to a motor scooter, with the accompanying caption: "Riders without helmets and the overloading of single passengers~~es~~ vehicles add to the high number of traffic-related deaths on India's roads."

The actual text of the National Geographic article was far more explicit. It referred to the GT as "cataclysmic" and "a maelstrom" and said of the road: "Today it bears some of the nastiest vehicular traffic on the planet... this is the world's worst road... set those trucks, cars, and buses down on a tarred strip maybe 16 feet wide, with dirt ruts on either side ... hurl them at one another at 45 to 70 miles an hour in an eternal life-and-death game of chicken... put between them bullock carts, bicycles, rickshas, jitterbugging motorbikes, and sluggish black minibuses... toss in ruminating cows, pariah dogs, surly camels, an elephant or peacock... add desperate-eyed pedestrians suicidally crossing between onrushing drivers who would never dream of stopping... then color the whole with blue-black smoke

from snorting exhaust pipes trailing a shroud of fumes that burns the eyes, sears the lungs, and seems to drain the life-giving oxygen out of the air.... Such are the joys of travel on today's Grand Trunk Road."

VIII. Travel Guidebook Information and Indian Road Safety

There are more reliable, high-quality, detailed travel guidebooks to India than for most countries, due to the fact that many foreign visitors there tend to be seriously fascinated by its cultures and the many crosscurrents of Indian society rather than being simply in search of a beach vacation. They therefore look to their guidebook as a responsible resource of complex information.

Many visitors are also extremely budget-conscious, as India is widely known as an inexpensive destination, full of bargains. It must be considered, then, that a natural tendency of some of these guidebooks, particularly those aimed at the frugal backpacker market, would be to encourage travel by road, since this is generally the cheapest way to get around. Yet these guidebooks are no less critical and cautionary about road travel than the other materials cited above.

All the following quotes are taken from guidebooks published from 1991-95, i.e. editions that Institute of Shipboard Education planners might have consulted had they wanted to check on the safety of various Indian modes of travel.

One place for careful travelers to start might be Fielding's

World's Most Dangerous Places by Robert Young Pelton (Fielding Worldwide Inc., Redondo Beach, Ca., 1995), which emphatically considers India one of them. One principal reason is the roads: "There are about 2 million km (1.2 million miles) of roads in India; 33,112 km of which are the national highways. While this constitutes only 2 percent of total road length, they carry around 35 percent of the traffic. According to the National Transportation Centre [in Trivendrum], Indian roads are the most dangerous in the world. With 1 percent of the total vehicles in the world, India accounted for 6 percent of total road accidents and has the highest accident rate in the world at 34.6 per 100,000 people [in 1988/89]. See 'Dangerous Things'... Travel by road after dark is not recommended..." (p.266; also see p. 270)

The Lonely Planet guidebooks ~~is~~^{are} among the most popular, reliable, and easy-to-find series. Their India volume, ever since its first edition (1981), has been the single most popular guide to that country, and won in England the Thomas Cook Guidebook of the Year Award. The two relevant editions here are the 4th (1990) and the 5th (1993). I shall quote from both.

India: A Lonely Planet Travel Survival Kit (4th ed., 1990, Lonely Planet Publications, Berkeley, Ca.) has the following warning: "Driving in India is a matter of low speeds and great caution. Indian roads are narrow and crowded. At night there are unlit cars and ox carts, and in daytime there are fearless bicycle riders and hordes of pedestrians. Day and night there are the crazy truck drivers to contend with... the normal driving

technique is to put your hand firmly on the horn, close your eyes and plough through regardless. Vehicles always have right of way over pedestrians and bigger vehicles always have the right of way over smaller ones. On the Indian roads, might is right." (p. 126)

Under the category of **Road Safety**, this 1990 edition of the Lonely Planet guide goes on to state: "In India there are almost 100 road deaths daily -- 35,000 or so a year -- an astonishing total in relation to the number of vehicles on the road. In the USA, for instance, there are 43,000 road fatalities per year, but they also have more than 20 times the number of vehicles that India does. The reasons for the high death rate in India are numerous and many of them fairly obvious -- starting with the congestion on the roads... One newspaper article recently stated that 'most accidents are caused by brake failure or the steering wheel getting free'!... [after an accident] lynch mobs can assemble remarkably quickly, even when a driver is not at fault! Most accidents are caused by trucks, for on Indian roads might is right and trucks are the biggest, heaviest and mightiest. You either get out of their way or get run down. As with so many Indian vehicles they're likely to be grossly overloaded and not in the best of condition. Trucks are actually licensed and taxed to carry a load 25% more than the maximum recommended by the manufacturer. The karma theory of driving also helps to push up the statistics -- it's not so much the vehicle which collides with you as the events of your previous life which caused the accident." (p. 127)

The later edition of India: A Lonely Planet Travel Survival Kit (5th ed., 1993, Lonely Planet Publications, Berkeley, Ca.) reprints all of the above verbatim and elaborates further: " ... you don't want to discover on the Grand Trunk Road with a lunatic in a Tata truck bearing down on you that you don't know how to take evasive action! The hazards to be encountered range from families of pigs crossing the road to broken-down vehicles, left where they stopped, even if that is in the middle of the road... It's staggering to see the number of truck wrecks by the sides of the national highways, and these aren't old accidents, but ones which have obviously happened in the last 24 hours or so -- if they haven't been killed, quite often the driver and crew will be sitting around, wondering what to do next... at night, it's best to avoid driving at all along any major trunk route unless you're prepared to get off the road completely every time a truck is coming in the opposite direction! The other thing you have to contend with at night is the eccentric way in which headlights are used -- a combination of full beam and totally off (dipped beams are virtually unheard of)... Night driving should be avoided at all costs. If you think driving in daylight is difficult enough, imagine what it's like at night when there's the added hazard of half the vehicles being inadequately lit (or not lit at all), not to mention the breakdowns in the middle of the road." (pp. 180-5)

The Cadogan Guide -- India, by Frank Cusy, (Cadogan Books, Ltd., London, 1993) quotes an Indian newspaper to the effect that

many bus accidents "are caused by brake failure, steering wheels falling off, or weakened back axles." (p. 33)

The 1994 South Asian Handbook {India & the Indian Subcontinent} (1993, Passport Books, NTC Pub. Group, Chicago) warns: "National Highways between major cities are heavily overcrowded. Oncoming trucks and buses very rarely give way. Outside the largest towns there are usually no road markings. While many roads are little used and very attractive, some of the main roads... have a great deal of heavy traffic, bullock carts, animals and pedestrians often creating a sense of total confusion. It is particularly difficult to drive after dark. Many vehicles have no lights, and there are often almost invisible obstacles on the road. It is much better only to drive in the daylight." (p. 23)

The Lonely Planet Travel Atlas -- India & Bangladesh (1995 edition) speaks of buses as "sometimes dangerous" and warns that because of heavy traffic "major trunk roads should be avoided." It continues: "Roads are often of poor standard, and routes like the Grand Trunk Road can be crowded and dangerous, with a plethora of vehicles -- from lumbering oxcarts to huge trucks travelling at great speed. At night, plenty of vehicles are not illuminated. Take care!"

The Rough Guide: India (Penguin, New York, 1994, repr. '95), another popular and thorough work (nearly 1200 pages) and to this author one of the most reliable, concurs. "Expect the unexpected, and expect other drivers to take whatever liberties they can get

away with. Do not expect them to obey traffic regulations, use indicators, give way or observe lane discipline... vehicles cut in and out without warning, and pedestrians, cyclists, and cows wander nonchalantly down the middle of the road... In the country the roads are narrow, in terrible repair, and hogged by overloaded Tata trucks that move aside for nobody, while something slow-moving like a bullock cart or a herd of goats can easily take the whole road. A huge number of potholes don't make for a smooth ride either... Accident rates are high, and you should be on your guard at all times, taking special care after dark -- not everyone uses lights, and bullock-carts don't have any... " (pp. 31-2)

The India Handbook (several editions, 1991-5) admonishes that, given the choice of road or railway travel, "It's better to go by train if there is a choice... travel by road can also be a worrying experience... Indian roads are often in poor - sometimes terrible -- condition... an endless succession of horn-blowing, unexpected dangers, and unforeseen delays... training in driving is negligible and the test often a farce... there can be real danger from poor judgment, irresponsible overtaking and a general philosophy of 'might is right.' And, of course, seat belts are virtually unheard of."

It is, in fact, difficult to find an Indian guidebook which does not warn about hazardous road conditions there; it is probably impossible to find one which asserts or even implies that Indian roads, and the GT in particular, are as safe as, say,

U.S. roads and hence a recommended way to travel on routes served by trains and planes.

VIII. Indian Trains

A natural question that might occur to anyone who has traveled on the Indian subcontinent would be: Why put American students on the roads at all, day or night, when there are the Indian trains? In the case of the lethal bus journey, the specific question should be: with arguably a month, and with at least a day in which to make some arrangements other than the plane, why wasn't an entire first-class coach, which could easily have been attached to one of the regular and frequent Delhi-Agra trains, not hired for the students? Why would a travel agent or administrators familiar with India even consider a bus?

The railway system -- inherited from the British, who built it -- is arguably one of the best in the world, the passenger and commercial bloodstream of the country. In a country of maximum inefficiency, it is relatively speaking one of the most punctual, efficient, and reliable institutions. It is far safer than the roads (or, one might add, than Indian Airlines, which has one of the worst safety records of any airline anywhere.)

How much safer? In 1995, about 60,000 people were killed on Indian roads in accidents; in that same year, by contrast, only 305 died on the Indian railways -- out of about 120 million passengers. (The New York Times, September 15, 1997) Even leaving aside the hundreds of thousands of Indian road accidents that did

not result in deaths, this makes the train about 200 times safer.

Most of all, the Indian Railways are justly legendary as a microcosm of the entire country. (The Rough Guide, like many guidebooks, speaks of it as {p. 27} "one of the great experiences of India" and "the definitive way to travel in India" {p. 32}). With its many complexities of first, second, and third class carriages, the Indian railway seems ideal for the Semester at Sea's stated goal, for its students "to interact with other cultures" (Semester at Sea brochure, 'A Special Message' from John P. Tymitz). The trains, it is well known, are the best opportunity for foreigners to meet and talk with Indians from all castes, backgrounds, professions, and locales in a crucial situation far more natural than any organized visit to a village.

To this writer it seems odd the students were not placed on trains rather than buses at every opportunity in the various India itineraries, or even instead of certain plane flights, such as Varanasi-Agra or the ill-fated Delhi-Agra. The train is safer, cleaner, more reliable, and faster than the bus in India, and it gives students a chance to see the towns as well as the deep countryside while meeting Indians from all walks and levels of life. As the Lonely Planet India guidebook (1993 ed.) says about buses, "they become uncomfortable sooner than trains and are less safe. If it's a long trip, it's better opting for a train...."

Likewise, Indian Airlines has a well-founded reputation as one's of the world's tardiest and least safe airlines, with entirely unreliable departure times. One is forced to wonder if

commercial considerations, like a travel agent's commission on many expensive plane tickets, lay behind such decisions. And, failing alternative transport instead of the Grand Trunk Road by night, Delhi is, after all, one of the largest cities in the world; there are many, many hotels.

IX. Travel Advisories & Statistical Reports on Indian Road Risks

The plethora of seminars and symposia over the last ten years inside India and abroad regarding Indian road risks are full of warnings and described dangers and alarming statistics. In 1989 a Government of India Report on roads put out by the Ministry of Surface Transport asserted that "India has one of the highest accident rates in the world, ranking first in number of accidents and fatalities... road accidents account for 13 to 14 per cent of total deaths in the country." It is hardly surprising the United Nations ESCAP publishes a set of Asian Highway Maps with an Advice to Motorists warning about Indian roads.

According to the National Safety Council (International Accident Facts), the overall accident rate on Indian roads increased at an average of 8% every year from 1975 to 1991. This means the annual rate of accidents is rising at about three times the rate of annual population growth; it also means that it was nearly four times as dangerous in 1991 as it had been a mere sixteen years earlier.

In terms of fatalities, at that point in only five years there had been an increase of 40% in the number of persons killed

every year on Indian roads (40,300 deaths in 1986, to 56,525 in 1991). These figures represented about 10% of total road deaths worldwide. By 1993 there were up to 59,300 reported fatalities on Indian roads, according to World Road Statistics, International Road Federation; that year there were another 277,300 reported traffic accidents involving injury.

One easily graspable statistic of road danger for someone even superficially investigating such issues might be the number of persons killed per thousand vehicles. This is an eloquent way of gauging relative road danger in one country alongside that of other countries. In 1989, for example, that figure (persons killed in road accidents per thousand vehicles) was 0.15 for Japan, 0.21 for Germany, 0.22 for the U.S.A., 0.23 for Great Britain, and 0.31 for Austria. The figure for India that year was 2.94, making it roughly 13 times more dangerous than the U.S.A. in terms of fatalities per thousand vehicles. (In the U.S.A., by contrast, the accident rate is steadily declining despite the ever-increasing number of vehicles.)

The average (1992) situation is even more dangerous for the busy National Highways, of which the GT is the busiest. In the country as a whole they represent about 2% of the road length but bear 34% of the fatalities. In 65% of the accidents on National Highways, trucks and buses "were the primary party."

So states a 1992 government study (Traffic Accidents in India, Central Road Research Institute, New Delhi). It also states that traffic accident rates in India are rising at 5% per

year, and fatality rates at 10% per year; and that that fatality rate per 10,000 vehicles was now 20 to 50 times the fatality rate "compared to America, England, Japan, etc."

X. Conclusion

Despite the assertion by the Institute of Shipboard Education that they "had no prior information that indicated that the road on which the accident happened was not appropriate for bus travel as was arranged," there was indeed a wealth of such information readily at hand via, say, an hour's research at any university or public library, the Internet, or a moderate-sized bookstore.

It is incomprehensible to this reporter that anyone who had spent ten minutes on an Indian road could have imagined that a six-hour bus trip on the busiest highway in India, by night, was a viable way to transport students. It is likewise hard for me to imagine why road travel in India even during daylight hours, with the exception of movement within cities, was part of the various Semester at Sea itineraries in India. It is so unpleasant, so intensely harrowing, terrifying, and exhausting, even when destinations are reached, that it has a counter-productive effect; and there is always the better alternative of the train.

On Indian roads, the risks are always monumental. The events of March 27, 1996, were predictable, and bound to happen sooner or later. They were also avoidable.