Vishnu and the Art of Motorcycle Driving: Toward an Anthropology of Traffic

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Expressive triumphs of sparkling wit mark each occasion spent with Gerald Berreman. Yet this oral legacy of humor, so readily transmitted and ubiquitous in daily contact with Gerry as teacher, fellow advocate, or adversary, is not so readily discovered in his voluminous writings.¹

In acknowledgment of his social grace and sparkle, I have dared to submit a reformulation of a paper initially presented at a Kroeber Anthropology Society Meeting years ago, where as speaker I enjoyed the laughter of colleagues. More serious (Rosin 1996, 1998) and published (2000) works have spun off from this initial presentation. Yet the role of humor remains, in the enlightened rush of self recognition, or in the gasp of a new perspective suddenly grasped. The tale well told, the finely articulated punch line, the triumph of real persons over the arrogance of caste or class privilege, the keen sense of timing and poise—a remarkable artfulness of delivery conjoined with the rush of insight at the instant of getting it—such have been the pleasures expected in a meeting with Gerry. Unlike this paper, however, his delivery is immediate—his humor quick, never needing to hesitate for a scholarly introduction.

Introduction

Roadway traffic is a social field distinct from the sedentary environs through which it passes. It has a setting, with boundaries, rules, and rights of access, whose definition and clarity vary from culture to culture. The pathways and stations of its members are an outcome of the physical constraint and opportunity of roadway and vehicle, rules, idiosyncratic features of capability, judgement, and fearlessness, and consummate values fulfilled through the driving process. Furthermore, traffic is interactive, involving most crucially the mutual communication and interpretation of intent. While we in the United States tend toward a rule-abiding program of privatized driving, with road instructions encoded in road stripes, signs, and signals and concretized in buffers, barriers, and guardrails, traffic in India is pre-eminently interactive and reactive.

It is not surprising that Anthony Wallace (1972), in an early article in the anthropological literature on American automotive driving, focuses on the standard driving rules, technical driving operations, and the route—analyzing his problem in
terms of the cognition and activity of the individual, rather than in terms of the symbolic interaction of many participants, as I propose to do here. His analysis is embedded in the cultural presuppositions of individualism projected into folk conceptions about the nature of traffic commonly shared by the American public.

For anthropology, Paul Hiebert (1976) integrates symbolic interactionist theory with the physics of everyday life in his comparative study of traffic in India and the U.S.; for sociology, Dannefer (1978) treats traffic as a context for social action. Our emphasis is to unite further the intentional with the physical in the study of traffic:

From the western sociological perspective, traffic is of particular interest for it is in traffic, at excessive speeds, where the intentional merges with the inertial—where the intentional actions by men in culture, as transmitted through their motor vehicles, now becomes the momentum of mass accelerated beyond anyone's immediate control. In traffic men and women enter the physical world of inertial bodies. [Rosin 2000:396]

Traffic as a flow in energy and mass must be increasingly constrained and isolated from sedentary society, with pathways precisely delineated, if this flow of accelerating momentum is not to deteriorate into mishap and mayhem. As I have argued elsewhere,

the street is becoming increasingly a locale for the catastrophic and tragic, the venue in which life plans and purposes are brought to an abrupt end, a final marking of a life with its ultimate fate. [Rosin 2000:390]

Accordingly, I stress the emerging nature of the street as a venue in which the individual must evaluate uncertainty and access risk in a context demanding incisive and continuous decision-making and near-spontaneous action. By focusing on the use of a vehicular and roadway technology, increasingly shared globally, the anthropological study of traffic should highlight universals in behavior as well as cross-cultural differences in intention, interpretation, interaction, and the management of risk. As an arena in which there is an acceleration in the momentary juxtapositions of innumerable lives on their separate, and often opposed, trajectories, traffic provides texts from which to read a people's conceptions about chance, fate, and human destiny.

In 1982 a research proposal to study how cross-regional differences in adaptation and social organization impact land reform brought me to conduct a half-dozen tours through scores of villages in every district across the sweep of Rajasthan State in India (Rosin 1994). The art of driving my Enfield motorcycle became central
to my survival. The understandings presented in this paper were hard won from moments of elation, and of terror, on the roadways of India. The quickened pace of modern traffic confronts us all with the temporality and fragility of our own lives. Such considerations invite either the sobriety of tragedy or the release of humor. Having survived the roads of India, I have sought the latter for my style of presentation.

**A Symbolic Interactionist and Physical Interpretation of Traffic**

An anthropology of traffic should begin with the cultural presuppositions that define the roadway and traffic. The core concepts of purity and pollution, so central to the understanding of social interaction in India, prove central to understanding its traffic. The Basic Proposition: The center of the road is the locus of greatest purity, with pollution increasing as one proceeds to the road edge (Rosin 2000).

This proposition rests upon a culturally recognized process of transformation, churning (Rosin 2000:377-381). When applied to an understanding of traffic, we derive an equation only recently explicated for Indian civilization: traffic churns filth, purifying it into dust (Rosin 2000:392).

Vishnu churned the Sea of Milk, creating *amrita*, the drink of immortality. The housewife churns curd, transforming it into buttermilk and its purified distillant, clarified butter or *ghee*. In a similar manner there is the churning of waste and debris into dust. Churning is the process in culture that transforms substances to higher states of purity.

Sweepers (*mehtariya*) in India do not simply remove filth and wastage, rather they shuffle it, sweep it, and pile it up for it to be trampled and redistributed again. Fitting it is that in English they are not called garbage men, trash- haulers, cleaners, but sweepers, for it is the sweeping process, the process of churning, that is the transforming act. Just as municipalities in the U.S. spray dirty water into the air in their sewage treatment plants, aerating water, as it were, to cleanse it, so does the broom, the hoof, and the tire throw up dirt in the traffic lanes of India, purifying it into dust.

Accordingly, all human and bovine traffic gravitates to the center of the road. It is a testimony to the purity and intelligence of the cow, that she too seeks the road's center. The center is favored, for impure substances are not deposited there, and because there the churning by traffic is most intense. One may observe throughout the villages and towns of India that women select dust and sand for scrubbing and purifying water buckets from the center of the lanes passing by their homes. They seek the spot churned by traffic.
The outskirts of the lane may be used for pollutive activities. One does not walk the outer edge of dirt roads when entering or leaving villages, for here in the darkened hours before dawn, many have relieved themselves as the first step in their daily ablutions.

There are no marked lanes on the traditional roadways of India. When the road is empty of others the center is taken; as others join the track there must be a yielding of space. If all are heading in the same direction, the entire roadway will be occupied. Even in cities such as Jaipur, the provincial capital of Rajasthan State, major traffic arteries can become one-way streets temporarily, until opposed traffic appears to make a claim upon the roadway. (See rule 4 in Hiebert 1976:332)

One yields the road in recognition of the persuasive claims of occupation asserted by others. One must interpret the intent of all others, and successfully communicate one’s own intent. We are dealing not with rights, but with their expression, with preemptive claims persuasively embodied in the physical fact of bodies with mass and velocity.

Traffic consists of the pathways of objects that must be appraised both in terms of their physical, as well as their symbolic, characteristics of intentionality. For a participant in the flow, appraisal may shift between the physical and the symbolic, as the communication of intent may be suddenly displaced by the physicality of momentous bodies, moving rapidly toward impending doom. In fact, traffic may be only second to sex as a common sphere of life in which the bases of interaction may oscillate so rapidly between the symbolic and the physical. (No wonder voluptuous ladies, and we hope handsome men, advertise automobiles in western culture. There are similarities in the experience that body and car each have to offer: the physically arousing and arousable person and the energized and intentional vehicle; intentions irrepressibly transformed into embodied desires, momentous vehicles in the course of their opposed, yet complementary trajectories. At the final point, just before climactic impact, or impactive climax, there is a promise of the loss of self.)

The twentieth century revolution in physics hinged in part on the recognition in relativity theory that the dimensions of space and time must be conjoined. All observations are made in a time/space continuum. Just as physics must consider the position and momentum of an object in relation to position and movement of the observer, and link the events of action and observation in terms of the speed of the impulses that communicate between the two (Einstein 1920), so must we consider traffic in relation to the linking dimension of volition (Parsons 1949). Objects in traffic observe and interpret the intent of others, communicate their own intent, and, in turn, mutually influence one another’s actions and intentions. Traffic entails a continuous conversation of intent. Although horns, hand gestures, signals, and shouts may inform, the traffic object in motion or rest is itself the main vehicle of
communication. It is, in semiotic terms, a sign, "a distinctive union of signifier and signified, not reducible to either alone" (Barthes 1972:111-7).

Intent in traffic is the expression of a total physical body that must be assessed in terms of its mass, penetrability, velocity, rate of acceleration, previous course, apparent rate of acceleration, and/or direction. From this information, one interprets its inertial state, its trajectory, and the alterations possible in its pathways, which may be expected or enforced. I coin my terms below, of course to amuse, but also to achieve a union of physical and symbolic interactional concepts, as they may be applied to an understanding of traffic. We may speak of three kinds of intent: inertial, trajectoral, and stubborn arrest. At this juncture in the investigation, illustration is more appropriate than definition:

The inertial intent of a concretized shrine in road center is near total. Sideswiping the edge of the shrine over time, as bus and truck drivers attempt, might soften the corners, but clearly the bulk of the shrine is there to stay. It cannot be cowed to move on. The inertial intent of a speeding, overloaded truck, taking over road center, also proves total: one either moves over, yields, or is totaled.

Trajectoral intent refers to the curve of the flight path projected by a vehicle as it weaves in and out of traffic, regaining and losing road center. In each culture one expects particular kinds of curves. It is in the assessment and enforcement of trajectoral intent that the Indian driver is the master of all cultures of traffic. A deft driver calculates the trajectory of oncoming cars in order to anticipate where down the road they may be forced back out of road center. One swings into the center of the road early to enforce their timely withdrawal: for a moment two opposed vehicles occupy the center. (Those who live to drive may boast about their mastery in timing; monuments of lingering wreckage, awaiting the dismantling craft of salvage, attest to those less competent.)

So that you may not be deceived to think intent expressed by mass, velocity, or acceleration dominates the road, let me illustrate the concept of stubborn arrest. If a saddhu, a religious mendicant, lodges himself on a Banyan tree root at the roadside, and if you threaten, cajole, or even beat him, but he refuses to get up, he is in stubborn arrest. Let him be, you can not budge him. You must go around.

In normal traffic, participants must assess at each moment the inertial and trajectoral intent of scores of others—trucks, buses, cars, carts, camel caravans, pedestrians, cows, dogs, pigs, and temples, shrines, and sanctuaries—stopped or moving, sideswiping, on-going, or on-coming. This is a very taxing activity, this figuring out the taxis (Greek, for “position, order, arrangement”) of so many intentional objects in a moving field of objects.
As speed increases, the number of objects up the road to be assessed increases dramatically. However, as one approaches the speed beyond volition, one no longer needs to assess others. Rather, they are forced to measure your mass and velocity as inertial, and beyond alteration. Your intentions have become the physical rocketing of your vehicle. So launched, they perceive your flight as beyond their influence since it is beyond your control. They yield. Any conversation of intent would occur without effect. In using the phrase speed beyond volition, the pivotal consideration is not the possibility of willful control of one’s own vehicle, but rather whether other agents in traffic recognize the possibility of a mutual monitoring and communicating to influence your volition and action. (Unlike the much-touted speed of light, previously treated by physical scientists as absolute, the speed beyond volition is relative.) The possible degree of influence over another vehicle depends upon the distance, speed, and nature of that vehicle, the traffic channel, and the conditions and instruments for communicating.

Clash and Crash: Competition for Space within Traffic

To take to the road, to enter traffic, is to claim and take possession of public space. Conflicting claims or clashes of intent to occupy the same space at the same time require immediate resolution. Clashes of intent may become crashes. (The distinction in outcome, “clash” or “crash,” may only be a matter of articulation, lateral or vocalized, the amount of friction, or kind of fricative, made in passage, quick as the wind, on roadway or palate.) Hiebert considers such conflict over space in the traffic of Hyderabad:

The primary question is who has right-of-way. The answer is based on complex calculations in which each player makes his move in response to the actions of others on the basis of certain immediate rules. [1976:329]

Two of the rules Hiebert analyzes state that players with high status take precedence over those with low status; those with high inertia, over those with low inertia. He cites rules to signal intention to pass on-coming and overtake on-going vehicles, with precedence ordering traffic so that vehicles with high status or inertia take road center, competing for space with those of similar rank. Unresolved is the weighing of the different ranks of precedence: “Status is technically more important than inertia....However, inertia commands a great deal of respect” (1976:331). The resolution of this issue requires a broader and more dynamic analysis than the one conducted by Hiebert.

One may analyze rules regulating and ranking relative access to the road, and record codified traffic laws written by municipal or state governments, but such rules and laws may prove but props in the dynamics of traffic in India. Rules defining allocations are not binding unless they are enforced by barriers, effective traffic
police, or by the counter-claims of opposed and on-going traffic. My effort here is to
go beyond the rules describing competency, accomplished by Hiebert, to suggest an
analysis of performance, wherein our interest is not the grammar of driving skills, but
the conversations of intent and strategies of interaction that involve displays of status,
courage, irrationality, and stubbornness, as well as non-volition. The resolution of
crashes of intent is a matter of considerable importance, for to take the road and force
another to yield is an act asserting dominance.

As members of an hierarchical society Indians, particularly of high status, may attempt to extend their authority and rights to participation in traffic. Yet, indeed, traffic is a distinct social field, separated by mass and velocity from the sedentary environs through which it passes. Those who ride the heaviest and fastest, and, today, the most impenetrable vehicles (e.g., buses and trucks in India, the Sports Utility Vehicle in the U.S.) may assert dominance in a manner that conflicts with their status in the hierarchy of sedentary society. Such violations of sedentary authority and proprieties of deference can only be redressed and punished when the violator is brought into rest, or arrested, from traffic. ("Arrest" in Middle English means "to stop the course of...a thing in motion," Oxford Universal Dictionary 1955:1, 100.) We have long recognized this fact in the U.S. in the use of the term "arrest" to refer to an officer pulling someone from the everyday traffic of life. Once arrested, vehicle occupants return to the sedentary society that happens to surround the road at that point.

If unarrestable, one need never submit to sedentary society. Trucking crews criss-crossing the Indian subcontinent may make this choice—never to rest. They might achieve total dominance of the road, if it were not for the reinforced provincial border crossings, where lines of hundreds of trucks are held captive by border officials. In many developing countries, sedentary society may have the legal, but not the physical, power to "arrest" the interstate trucking on their roads. In such cases, truckers may become renegades.\(^5\) They assert dominance in the interactional, and often international, field of traffic, never submitting to the authority of the various sedentary societies through which they pass.

To extend one’s status to influence one’s position within traffic would require effective communication of that status. In India, ownership of a car alone is a statement of status, but in the past the lack of vehicle variety complicated communicating the gross difference in actual rank among those driving, or being driven, in cars. Subtler features must be used to indicate status: the newness, the shine and polish of a vehicle, the costume of the chauffeur, the accoutrements of the curtains, or as Kathie Zeretsky (personal communication) points out, the use of special colored lights, as in New Delhi, flicked on to indicate that an elite is approaching. Truckers and bus drivers recognize that it signals the vehicle of an important politician or administrator, one who could make trouble for them, and they yield accordingly.
The use of the car as a vehicle communicating the status of the driver in the U.S. is too obvious to require further explication here. The highways here are, indeed, a stage on which to present and celebrate before a broad public of strangers the putative prestige of the usually unseen, or at least unknown, occupants. Fine hotels and restaurants may stage the embarking and disembarking from traffic, when others may view elites in the context of leaving their prestigious vehicles.

To the role of status, momentum, and impenetrability in the clash of traffic, one must add maneuverability, or the demonstrated control over trajectory, as it may be communicated through the design and operation of the small sports car. The semiotics of the vehicle, at rest and in motion, is a major study in its own right, with obvious implications for the study of contemporary culture, as suggested by Barthes in the “The New Citroen” (1972:88-90).

To manage traffic to their own advantage, individuals may use a variety of strategies. I pick out for description two strategies essential to working the roads of India. We would expect such strategies in the culture of traffic to rest upon general presuppositions of the society at large. In these two cases, the essential presuppositions are that 1) even the elite or the powerful must yield in the face of necessity, and 2) the low in status may coerce others to view and acknowledge their presence, and, in so making their reality known, can claim the minimum required for their continued survival.

*Staging and communicating a situation of necessity:* A driver and crew may transcend the conversation of intent, in which some adjustment to the intention of the other is expected. One may use the circumstances, if available, to stage a situation of necessity. The common maneuver is to pass another on-going vehicle (in India on their right) so that one takes over road center. Once one is in the process of passing, a situation of necessity is created, for one can no longer yield to the side for on-coming traffic. They must yield. Your intentions are a *fait accompli*. Choice of action is replaced by the physical constrictions of the situation. The moving setting of two on-coming vehicles abreast communicates. One cannot be cowed into yielding, for no alternative actions are possible. The human element of choice has been removed from the situation.

*Caravan Hopping:* Perhaps the most joyous moment in passage is caravan hopping. One has suffered the forced slow-down of traffic. An on-going vehicle in front chooses to create a situation of necessity by boldly passing the slower vehicles. After honking wildly, they move out to the right, taking over road center. As they pull abreast of the vehicle they are passing, on-coming traffic is forced to yield. Now is the time to hop the caravan. Quickly, one pulls in tightly behind the passing vehicle, entering the situation of necessity before they should leave it. Each vehicle behind you in turn joins in tightly. The caravan is now created, each member in sequence dominating road center as they pass, while the on-coming traffic is nearly halted or
thrown off to the shoulder of the road. For a moment there is the joy realized in spontaneous corporate action, when the other side must yield and witness your success.

As evening approaches, the darkening of the roadways affords opportunities to communicate a status, a momentum, or a degree of impenetrability that is higher or grander that one’s vehicle and person may warrant when viewed in the bright light of day. As mentioned above one might use colored lights to emulate the vehicle of a political elite. Far more promising is the strategy Gerald Berreman recalls in a recent correspondence. He managed to project the headlights and trajectory of his jeep to simulate a truck worthy of dominating the road.

I was driving my family and another from Dehra Dun to Delhi in an old Jeep station wagon—a trip of about 8 hours on a rough, dusty narrow but metalled, two-lane “highway,” populated by the full panoply of Indian traffic. I was constantly driven off the road by the trucks that dominated the road, and into all of the impedimenta that occupy its margins. Tired and frustrated as darkness enveloped us, I realized that just as I could see only their lights, their drivers could see only mine. Somewhat tentatively, I experimented by changing my driving strategy from veering away from a pair of headlights bearing down upon me, to veering toward them. As I had thought might happen, the truck—its driver unable to distinguish the elevated lights of my Jeep from those of another truck—verred away from me. I soon grew confident of my new-found dominance on the road, and proceeded gleefully into Delhi without leaving the pavement, a trail of trucks left behind to negotiate their way back to the pavement from which they had retreated in fear of my assertive behavior, its fakery to be discovered, if at all, only in their rear view mirrors. [letter to author, 8/27/01]

Under cover of darkness, such strategies of courageous deception attest to the primacy of communication in this imminent domain of interactive traffic.

Encroachment and Eminent Domain: Competition for Space between Traffic and Sedentary Society

Traffic marks the landscape by the friction or impact of use. Special preparations of the surface with cobbled stone, or more recently asphalt and concrete, may identify its pathways. Yet the use or reservation of such a roadway for traffic remains a contested matter in many nations. Traffic in India often must contend with a diversity of claimants and a multiplicity of uses—sharing its place with, or next to, fresh water conduits, rain run-off, sewers, public displays, commerce, children at play, and ruminating cattle. To understand this contest between traffic and sedentary
society would require an ethnography of the road and its uses, based upon observations of the full daily cycle:

Consider the roadway at its darkest hours, cattle sleeping, taking warmth from its sun-heated asphalt. Before sunrise its edges serve elemental needs. At sunrise, it is a track for middle-class joggers, then a bathing spot for early risers. Flower and vegetable sellers mark out their spots with burlap bags, but soon yield as a growing tide of traffic at 10 a.m. pushes back the sedentary occupants. But, with the waning of traffic in the midday heat, cattle and men with string cots move in from the edges in the shadows of trees to reclaim it for a snooze. A truck parks so its mechanics may begin hours, even days, of repair. A flood of traffic in evening waxes then wanes, as the night fires of families move in from the edges for eating and sleep.

Yet recording a full day would prove inadequate, for the arts of encroachment and reclaiming public land for interests private and familial, commercial or religious, involves years of commitment, patience, and persistence. Consider this case observed over a decade on the edge of the Sawai Mansingh Highway in Jaipur, Rajasthan:

The religious mendicant began his roadside shrine as abut a small sacred campfire (dhuni) for his all-night devotional singing, expanding it soon to include a small altar to the God Hanumanji, then constructs a bench of stone to store and keep pure his water in jugs, from which he began serving passing pedestrians. A garden is planted to cultivate holy basil (tulsi) and flowers as offerings at the altar. An awning on poles is erected to give protection to the cots arranged for his devotees. Finally the congregation enlarges the sacred place by encircling the altar with temple walls.

In 1982, when Jaipur City tarred-over a parallel side road, its width was narrowed in half at this point in order to skirt around this sacred complex. Here is a strategy of encroachment that almost proved irresistible. In the late 80s, however, the municipality reclaimed the street one morning, in a surprise attack with bulldozer and police, for uses profane.

**Evolution and Development of Traffic**

Although traffic is sufficiently ubiquitous that modern folk think they agree on the kinds of events to include under its label, a cross-cultural and cross-species perspective might highlight inadequacies in our unanalyzed folk conceptions. It is among the social insects, ants and termites (Hölldobler and Wilson 1991:285-6), that one perceives a flow of traffic comparable to that of humankind in that there are defined pathways, bi-directional movement, with a frantic coming and going, bottle-
necks, and occasional intersections to confuse. All features are enhanced by a certain density of endeavor in a restricted setting. The movement observed is not to hunt, to gather, or to mate, but to carry and to relocate. Traffic is associated with "going about business," rather than actually "doing business." It emerges among commoners in stratified societies busy with the tasks of life.

Traffic among humankind is an emergent phenomenon. We must link it with the increasing density of human settlements, in which the daily and seasonal round brings together a multitude conversing and dispersing. Such a unidirectional, nonlineal, oscillating flow we can expect to occur among densely settled hunting and gathering peoples, with a lineal pattern emerging on game trails or trade routes which are intensively, seasonally used.

The larger and more dense the settlement, the greater the potential flow of traffic. As domesticated animals enter the human settlement, the congestion only increases the flow. Traffic par excellence emerges with the population concentrations associated with civilization. The internal circulation of their populations in urban centers creates traffic. Such urban clusters are linked by roads to hinterlands of villages and hamlets and by trade routes to other regions. But such linkages in themselves may not generate traffic. A network of roads that militarily and politically links culturally disparate regions, as occurred in Inca civilization, may in fact be so regulated, that the flow pattern will not have the randomness, multiplicity of directions, nor density we would expect of traffic. As Kantner (2001) argues for the prehistoric Chaco Anasazi roadways in the southwest of the U.S., the linkages they afforded seem to serve religious and political, rather than economic, functions. A degree of liberated commercial activity, involving numerous exchanges, would generate the kind of multi-directionality we associate with contemporary traffic.

Lineal movements in a single direction constitute a migration, an exodus, a march, a procession or parade, or more recently, a demonstration. While any one of these movements may be a constituent part of traffic, contributing to the experience of confusion it has to offer, they do not constitute traffic. Processions and parades normally stop traffic, for the multitudes must stand back to witness and to celebrate. In archaic civilizations the potentates of state and temple, with their retinue, would preempt the roadway. Tribute in goods and persons flowed in processions to the center.

It is a sign of our new age that the roadways can be taken over by the laboring masses or the dispossessed, in strikes and demonstrations, not to celebrate the social order, but to protest it. Others must stand back and witness, often entertaining attitudes of dismissal or contempt for the disenfranchised, who for once preempt the road. Their preemption is a symbolic inversion of the traditional use of the road to stop traffic as a display celebrating authority.
Crowd activities on the roadways, indeed, are powerful indicators of the popular attitudes that may or may not impart legitimacy to a regime or an institution. For traffic to stop voluntarily for state authority there must be broadly dispersed popular attitudes of respect, awe, or fear. The spectacle of a royal procession in the princely states in pre-Independence India was sufficient to stop traffic.\(^6\)

With the formation of the Indian Union, and the accession of the princely states of Rajputana to the new nation, the royal procession became replaced by the state parade of politician, bureaucrat, and military hardware. Throughout India today such parades, tarnished and made dull by the personal style and self-interest of the politicians, are witnessed by crowds who are increasingly difficult to keep in line. On the other hand, traffic stands back and yields readily for wedding processions, as each family assumes, as their right, the entering of the city lanes to display the bridegroom on horse or elephant, with wedding band and kinsmen, who increasingly include the bejeweled and dressed ladies of the family. For while the modern state is not protected by pervasive attitudes of respect, the family in India does remain the focus of approval and the level at which propriety and ethical action remain possible.

It is through the progressive isolation of traffic from its sedentary surroundings that traffic emerges as an independent sphere of causality forcing modifications upon its environment. As the lethal impact of modern traffic increases, it is perceived as a necessity to diminish its costs in lives and to mitigate its effects on sedentary society. The modern state creates agencies devoted to traffic management, but all too often it is not only traffic that is mediated and regulated, but also the sedentary environs which are modified and redesigned.

Hiebert points out the development in the U.S. of third-party mediation of traffic through laws segregating kinds of traffic, light signals regulating movement, marked lanes, and specially designated roadways routinizing the options and paths of vehicles. He is properly cautious in considering this an evolutionary development, from the immediate transactions of traffickers interacting directly with one another, as is found in India, to the mediated transactions “that standardize and depersonalize interaction,” as is found in American traffic (1976:334). As he points out, “introducing mediate transactions is a way, but not necessarily the only way of creating order in increasingly complex traffic” (Hiebert 1976). While he is stressing the differing cultural presuppositions, or principles creating order, which may be brought into play in effecting traffic solutions, one should stress also variations in the nature and flow of traffic. Such variations in traffic are related to speed and range of speed among participants, their density and diversity; the restrictiveness, interconnectedness and multiple functions of the roadway; the nature of the regulated and unregulated exchanges/interactions between traffic and sedentary society; and, most importantly, the degree of freedom in choice and possibilities of action by participants. The latter is central to an understanding of traffic, for traffic is the aggregate outcome of the actions and interactions of its individual participants.
As traffic becomes emergent and generative in human society, a people’s conception of individual autonomy, choice, and social responsibility may have a great deal to do with their experience and expression as drivers on the road. Teenagers are socialized to their roles and responsibilities as citizens in the U.S. today, not in the traditional civics classes, but through programs in driver’s education. For many of them, to be out there in society is to be there in traffic, as Friday and Saturday night main street cruising demonstrates.

What traffic has to offer the individual in America is the right to overtake and be overtaken; the opportunity to display a vehicle and its maneuverability; a chance to beat time; unlimited choice of pathways spanning the continent; momentary contact with a multitude of others, most of whom are unlikely ever to become significant or binding upon one; and the exhilarating control over speed and trajectory as one tests fate and confirms one’s grip on life. Once in traffic, one has the obligation to be attentive and engaged. One’s involvement with life is guaranteed for a while.

But as traffic has evolved over the last century, with an increasing mass of vehicles on the roads, moving at accelerating velocities—with individuals managing parallel, interweaving, and diametrically opposed pathways, as well as right angled crossings, and round-abouts—there has been a corresponding intensification of attention, focus, and adherence to one’s initial intentions to get there. The balance of embodied and energized selves sharing for a moment the roadways of the world has become fragile. Such accelerating mass and energy, matched by the increasing intensity in intention, must be increasingly constrained, to prevent the physical, and potentially fatal, contact among participants. “But as kinetic energy increases, so must the constraints, if the system is not to break down into catastrophe” (Rosin 2000:400):

Traffic as kinetic power is constrained by curbs, guided by conventions, rules, and common courtesies. Such containment affords efficiencies in coordinated movement, harmonies in reconciled wills, a taming of self interest to accommodate one’s movement to that of others. As coordination and responsiveness to one another intensifies, so may speed and the flow of people to fulfill their diverse interests. [Rosin 2000:400]

The worst moments of traffic occur when vehicles, animals, and pedestrians collide. A chaos of twisted vehicles and bodies, a loss of human purpose and aspirations, an over heated tumult, marked by the internal anguish of particular lives lived, suffered, and at this very moment lost. [Rosin 2000:390]

Accordingly, as one anticipates enter of traffic, there may be an evaluation of uncertainty, an assessing of risks, and efforts to manage and mitigate risks to self and
others. Even in this age of such computerized simulations as Advanced Traffic Management Systems (ATMS), sensors, large data banks, and Traffic Bureaus overseeing the flow in whole cities, a vast literature of books and journals on transportation, accident analysis, and safety,7 the very use of such monitoring, information processing, simulation and control, so Nagel and Rasmussen have argued (1994:222), will not remove the unpredictability of traffic: “the system as a whole will be driven closer to criticality, thus making predictions [of travel times] much harder.” I would argue further, not only travel time, but risks and catastrophe also are implicated when a system of flow moves toward criticality. Roadway and vehicle, while increasingly a means to realize individual choices and intentions, are as well threats for those who use them, to the continuance of any and all intentions.

**Traffic as Text: The Generation and Expression of Conceptions about Chance, Fate, and Human Destiny**

On the roadway, the union of human and machine is nearly complete. Thereon one is submitted to the hazards of the accelerating velocity of mass that exceeds the limits of one’s relatively fragile body structure and tender parts.

To enter traffic is an immersion, a submission to noise, smells, repugnance, jostling, the breathlessness of rapid acceleration, sudden fear, and, in the worst case scenario, an alteration in pulse and breath in the panic of recognizing immediate danger. There is recognition, once so immersed, that one’s fate is caught up in a swirl of encounters with a multitude of others, each met for a moment on pathways to their own destinies. [Rosin 2000:378]

Destruction, injury, and death enter as possibilities to interrupt the daily routines of life. What sphere of daily life could better provide expressions and actions that might reveal the deep structure of a people’s conceptions about chance, fate, and destiny? Too often the “text” from which investigators seek answers to these questions are those tomes of philosophy and religion written in the security and quiet of the cloister or the study, isolated from the flow of life. Investigate the roadways; make traffic your text.

It is too easy to point out that nearly each public or commercial motorized vehicle in India has a shrine to a patron deity or saint on its dashboard; that flower boys hang around truck stations on the roadside to sell wreaths of flowers each morning as offerings; that incense is lit as the ignition is first fired each day; that an invocation (pranam) is given by a driver as he takes over the wheel. Clearly, the divine is propitiated or invoked to protect one’s fate on the road.

Furthermore, when to enter the flow, what day of the week, the direction chosen, the very time of day at which to embark, are important considerations in
South Asian civilization. Such matters are submitted to astrologic and calendric considerations. Herein are conjoined the flows, pathways, and orbits of persons, the respective life course of each, the moon and the planets (see Rosin 2000:378), with both safety in travel and success in enterprise at stake.

To illustrate the potential richness of this sphere of activity for investigation let us shift attention to our own culture. Consider, for a moment, what is meant by accident in the U.S., a word derived from the French, accident, means “falling chance”—the Latin ad combined with cado means “to fall” or “befall.” An accident is an event that befalls you. I suggest that the earlier usage in American English refers to a chance happening, beyond either the workings of causality or human choice and responsibility.

To what extent has our conception of accident been shaped by four generations socialized to the motorized vehicular traffic of the roadways that increasingly encircle our homes, our offices, our markets, our friends and relatives, and our places of recreation? An “accident” today is an event not of chance, but of physical causality and human action, for which responsibility, accountability, and possible culpability must be established. Vehicular design, production, or maintenance may be at fault; road design and maintenance could be inadequate; a driver could be disobedient of law, ill coordinated from drink or drug, or poor in judgement—only the weather causing “hazardous driving conditions” provides the residue of chance in the encounter. No one escapes the net of responsibility, for all are morally implicated in the creation of individual destiny. So develops our culture’s conception of the individual and the events that just might twist or turn his or her expected life course. Unforetold and unfortunate events now become matters for courtroom litigation.

The lore of the courts, accident attorneys, insurance agencies, as recorded in traffic officer reports, judgements, and settlements, give to our culture’s notion of time, chance, and fate “a clarity, which is not that of an explanation but that of a statement of fact” (Barthes 1972:143). The notion of causality in nature is applied to the realm of individual action so that accountability exists not as an underlying ethic of our culture, but rather as a part of a “background which is already naturalized” (1972:142). Chance is disentangled into its causes. We are dealing with myths grand in scale that lay the groundwork for our understanding of human action and events in nature.

Epilogue

In conducting my tours through rural Rajasthan, I did not submit my fate to destiny unprotected. The tours by motorcycle covered six thousand miles of dirt track, village lane, and truck-dominated highway, with my research assistant Sukhdev Sharma straddling the cycle behind me. From the outset I planned to avoid risks by
consummate skill, vigilance, quick reflexes, and a sharpened sense of responsibility to limit speed and submit my cycle to rigorous standards for maintenance.

I was to avoid distractions on the road—until I met, at an unbanked, sharp turn of the road, a shepherdess of the Rebari caste in a long flowing, swishing skirt, wearing a cowry-braided belt about her waist. Here was our first accident, 45 minutes after departure—after my assistant had warned me that this day would be inauspicious to launch a tour in the direction proposed.

As we gathered ourselves from the tarmac (and I repaired my broken accelerator cable with a paper clip and adjusted myself to steering skewed handlebars with a torque to the right, giving the illusion that I was steering right into on-coming traffic), my assistant wisely ordered us that night to a famous Vishnaivite temple in Diggi. (He felt his life and limb were at stake.) At dawn he did his daily ablutions, bathed in waters chilled by winter, prayed at the temple, then completed his daily meditations at our campsite. That afternoon at a most auspicious phase of that day, satisfied that his austerities and devotions would gain us safety in travel, as well as success in our enterprise, he said we could now resume our travels. For eleven days we had numerous serendipitous encounters (see Rosin 1994; 1995:24-6). Nevertheless, on the last day of this initially inauspiciously launched tour, just six hours before our last scheduled interview, we had our second and final accident, driving into water buffalo. A herd had opened up and then unexpectedly closed back upon us, locking us into the center of the herd, at the center of the road. (My assistant suffered a probable hairline fracture of a long bone in his foot.) After these events I had no choice but to commit the time of our future departures to his astrological and calendric judgements and to conduct the tours in a manner to assure the sanctity of his daily Vaishnaivite worship. Astride our motorcycle, he bore across his forehead the red and white vertical stripes, the tilak or insignia, of his morning worship to Vishnu.

And so I dedicate this paper to Lord Vishnu and to His dedicated servant, Sukhdev Sharma. I am happy to be alive.

Works Cited

Barthes, Roland

Beck, Brenda E. F.

Berreman, Gerald D.


Dannefer, W. Dale

Drury, David

Einstein, Albert

Kantner, John

Hiltebeitel, Alf

Hiebert, Paul

Hölldobler, Bert(hold) & Edward O. Wilson

Nagel, Kai and Steen Rasmussen

Parson, Talcott

Rosin, R. Thomas

1996 The Street as Public Commons. Paper presented at the University of Wisconsin Conference on South Asia, October 18-20.


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1 The titles of his works that are humorous alert us to articles that critically challenge the profession: “Anemic and Emetic Analyses in Social Anthropology” (1966), “Is Anthropology Alive? Social Responsibility in Social Anthropology” (1968), “Academic Colonialism: Not so Innocent Abroad” (1969), and “Himalayan Research: What, Whither, and Whether” (1978). In the recent (April 6, 2001) University of California at Berkeley conference which celebrated his decades of critical inquiry, teaching, and research, Berreman in his culminating conversation with the audience, playfully re-titled his now classic “Behind Many Masks.” May the editors use this occasion of a festchrift to inscribe into print such delightful examples of his verbal virtuosity. His humor is readily found, however, in his correspondence, as I have quoted below. We find an example of his keenness to articulate in works, as well as construct in action, the amusing twists and possibilities of daily life, in a manner to discover, as well as to test, the limits in human interaction. Herein is a humor of discovery, conjoined with empowerment, to shift the balance among the weak and the powerful.

2 The Statesman (June 1, 1982, p. 4) reports:

“In 1979, the rate of accidents per 1,000 vehicles was 9.4 in France, 13.7 in West Germany, 4.8 in Sweden, 14 in the USA, 10 in Japan, and 34.6 in India.”

“Against the casualty rate of 55 (per 1,000 vehicles) in India, the deaths in France in 1979 were 4.8, 4.9 in West Germany and 3.3 in the USA.”

The India Express (May 17, 1982, p. 3) reports on the nature of the threat to both pedestrians, bicyclists, and those riding scooters, and, I would add, motorcycles:
“Delhi accounts for the highest number of road accidents in the world, according to Mr. A.K. Banerjee of the All India Institute of Medical Science here ... the worst sufferer was the pedestrian. Out of 663 deaths due to head injuries in 1981, 246 victims were pedestrians, while 137 were victims driving cycles.”

“Regarding accidents caused by vehicles, buses caused 194... and only 45 mishaps were due to cars... 87 persons sustained injuries due to scooter mishaps...”

Thanks to Zaretsky and Berreman for bringing to my attention these news items, documenting the risks confronting those using the roads during my period of field research.

3 Cf Hiebert 1976:331-2 on the use of signals in India, which are most important but not primary in the communication of intent. The horn in particular is used not only to communicate specific intent but to alert others to your presence, which they must then read correctly. Such sounds, even from behind, marking distance and rapidity of approach, are important messages, as is the insistent, unbroken duration of beeps that indicates stubbornness. Furthermore, as David Drury points out in his correspondence, each kind of vehicle is signified by the sound of a different kind of horn:

The sound usually does tell you... the approximate size of the thing that’s coming up behind... Bicycles and bicycle rickshaws have pleasant tinkling bells; bullock carts have big bulbous brass hand-squeezed horns;... scooters and mopeds, ... ugly little buzzers; motorcycles, ... more melodious buzzers; ... cars, ... smooth two-note horns; ... trucks, ... either the standard low air-horn or an ear-shattering high-pitched blast of a whistle.... [Drury: 1981]

Reflecting on the effectiveness of the trucker’s horn for communicating to and influencing the drivers of scooters just ahead, he remarks, “... being blown out of my seat is a mark of driver courtesy and safety....”

4 Among person, social order, and cosmos, Hindu thought encourages finding analog or homology (Beck 1976; Hildebeite 1976; Smith 1989) as a means of apprehending the relation between the knower and the known, the speaker and the spoken, the outer sound and the inner meaning.

5 The film “Road Warriors” celebrates such renegades who achieve dominance in the aftermath of a failed nation-state.

6 On the streets of the once regal city of Bikaner, we witnessed in 1979 the final demise of regal authority. Although the Raja of that region had given up his title and crown soon after Indian Independence, the pageantry of the city continued to focus on the royal family, whom the public regarded with love and respect. On the occasion of Gangaur each year, the streets would fill with people to witness the royal procession. In recent years, however, the crowd was becoming increasingly unruly. That year, 1979, the royal family, sensitive to the changing attitudes, sent the royal carriage drawn by horses, but empty without its lord. As the procession approached, the crowd would not stand back. Pandemonium broke out. Traffic swamped the procession. For a moment, it had appeared that the crowd was joining the procession to celebrate themselves, as might be appropriate in a democracy, but the ensuing confusion of a multitude, each presenting self and ignoring others, ended the public ceremony.

7 For example, Pergamon or Elsevier publish the Journal of Safety Research, Accident Analysis & Prevention, the Journal of Transport Management, Transportation Research Journal Series,
Safety Science, Transportation Policy, and various Proceedings from international conferences on transport Research, transportation, and traffic theory.

8 A trope in the oral literature and song of Rajasthan is the prince distracted by the shepherdess. As an “orbiting” Fulbright foreign scholar on motorcycle I appear to have exhibited the same proclivities.