My son, in his relatively short driving career, has already caused two rear-end collisions. Fortunately no one was injured in either crash. But once the insurance claims were settled and the new, higher premiums had been paid, I was left with a nagging concern for the safety of my son, a young driver, and for other motorists with whom he shares the roads. I ordered Driving Lessons: Exploring Systems That Make Traffic Safer for him. When it arrived in the mail from The Alberta Centre for Injury Control and Research (ACICR), I couldn’t help reading it myself.

Editor J. Peter Rothe is senior associate with the ACICR and assistant professor of public health at the University of Alberta. This collection of articles is the result of a project he undertook after the 1998 Alberta Traffic Safety Summit. More than a compilation of conference proceedings, these twenty essays are an attempt at a coherent presentation of the design-systems theory on which the conference was based. Rothe describes it as “a book of alternative thinking, framed within recent cybernetic theory.” In it, the reader will encounter not only cybernetic theory but also discussions of neoliberal ideology, the dialectics of freedom and motion, the “ecology of vulnerability,” “postmodern conceptions of human reengineering” and a few dominant paradigms in need of a good shift.

Contributors include road-safety researchers and engineers, geographers, a designer, psychologists, anthropologists, sociologists, representatives from the Alberta Motor Association, Mothers Against Drunk Driving (MADD), and a few doctors — among them, the emergency physician and tireless injury-control advocate, Louis Francescutti. The articles are grouped into sections on personal, institutional and technical subsystems. Topics range widely from “Dealing with Stress, Aggression and Pressure in the Vehicle” and “Rural versus Urban Drivers” to “Understanding the Political Basis of Traffic Safety” and “Red Light Cameras.”

According to Rothe, the multidisciplinary approach of cybernetics “helps to distill and clarify ideas and conceptual patterns, opening new pathways of understanding in traffic safety.” Rothe acknowledges the structuralist theories of Lévi-Strauss and their influence on his thinking about road safety. In the context of structuralist anthropology Lévi-Strauss reasoned that “a state of continuing death and injury is a systemic product rather than the product of individual pathology.” In Driving Lessons the recurring message is that the relationships among the phenomena that contribute to traffic safety (or the lack of it) are more important than the individual factors.

Traffic safety is a very big public health problem; some would argue it’s the biggest one we have in this country. Jorge Frascara gives an impressive review of mortality and morbidity in his article, “Revisiting Communications and Traffic Safety.” As a direct consequence of our autocentricity and hypermobility, 5000 people a year are killed in Canada and another 200,000 are injured or permanently disabled.

Given these statistics, I asked Rothe why traffic safety does not have a higher profile as a health issue, in the same league as heart disease and cancer. His answer was that we internalize the roadway carnage as part of everyday reality. As a society of drivers, we normalize certain behaviours that, over time, lead to crashes: occasional speeding, ignoring other regulatory signs, lapses of caution, driving under the influence of alcohol or fatigue, driving while socializing, and inattention to necessary vehicle repair.

It was instructive to read this book during BC premier Gordon Campbell’s recent fifteen minutes of infamy. His story is a good illustration of the predominant paradigm of the blameworthy driver. Clearly, Mr. Campbell should not drink and drive. At the same time, by focusing so much attention on one individual’s blood alcohol level, journalists missed an opportunity to examine some of the more complicated and equally important factors that contribute to what Lawrence P. Lonero (in “Driver Skill”) describes as “safe, mature, efficient and socially responsible use of the roads.”

Under certain conditions it is possible, and reasonable, to blame irresponsible drivers, bad roads, rotten weather, failed technology, and unsafe vehicles. But with all due respect to MADD (whom I support), paradigms of blame are of limited utility to help us understand road crashes or to produce strategies to make road travel safer. In “Driver Identities over the Lifespan,” M. Boyes and P. Litke observe, “While there is only one driver per vehicle (excluding, of course, the back-seat variety), the individual driver is a component of a larger system that includes other drivers on the road, pedestrians and, ultimately, society as a whole. A safe journey requires cooperation at all levels.”

One of the most insightful essays in the collection is “Risky Vehicles, Risky Agents: Mobility and the Politics of
Space, Movement and Consciousness” by Peter E. S. Freund and George T. Martin. They explore the “embedded material infrastructure” and the less visible but equally pervasive “social infrastructure” that has grown in the wake of mass motorization. In discussing the “hegemony of the automobile” with regard to the use of public space, they alert us to two emerging, and troubling, trends. The increasing numbers of larger and heavier vehicles creates “an attendant ecology of vulnerability.” This new “harder hyper-automobility” makes increasingly “stressful demands on the consciousness of those who participate in traffic (in any capacity—even as pedestrians).” These demands are for constant ‘sobriety.’ (This term is used in the broadest sense, meaning general psychomotor competence.)

A practical consequence of this hardening of the collective fleet is that “When a car collides with an SUV, the driver of the car is thirteen times more likely to be killed than the driver of the SUV.”

Crashworthiness is a relatively recent addition to the lexicon of automobility. When auto dealers use the term to market bigger and beefier trucks and SUVs, they are selling more than personal safety. Freund and Martin write:

The emphasis on the crashworthiness of cars glosses over the fact that the individual car is part of a traffic matrix in which vehicles mix with varying degrees of protection. This way of thinking … is analogous to the logic of an arms race, which would argue that roads will be safe when all softer means of mobility are banished and all that are left are tanks. … Such a Hobbesian traffic condition has obvious social drawbacks, including the fact that it seriously disadvantages traffic participants who are walking, cycling or using relatively light autos.

However, to shift blame for highway carnage from drunk drivers to those who make the “defensive” purchase of an SUV is not likely to be a fruitful strategy. (The need for the future disarmament of our roadways, however, may be less of a science fiction than it seems.) Freund and Martin’s key insight is that “There are structural limits to universalizing high social standards of self-regulation. These systemic limits constitute the boundaries of accident prevention techniques, which focus on individual behaviour.” So-called driver improvement initiatives, be they the modification of driver behaviours involving the use of alcohol or cell phones, or the attenuation of consumer desires for bigger and more powerful vehicles, can only ever be partial solutions. Freund and Martin conclude:

It is not so much that the present safety orthodoxy is wrong but that its focus on technical and individual interventions leaves collective and structural factors unaddressed. … At its root, much of the roadway-safety issue centers on a competition for the most desirable socio-material space of daily mobility — the built environments created to provide people with channels for access to sites where they work, shop and live.

Yes, Gordon Campbell should not be allowed to pour his own martinis. And we are probably safer if he doesn’t drive an SUV. And yes, my son should take some additional safe driving and crash avoidance training. Both of them should read Driving Lessons.

Vincent Hanlon
Emergency Physician
Lethbridge, Alta.

Lifeworks

Camouflage and exposure

Canadian General Romeo Dallaire’s heroic efforts to prevent the 1994 genocide in Rwanda and his subsequent battle with post-traumatic stress disorder (PTSD) is the powerful subject matter of UNdone: Dallaire/Rwanda, an ambitious cycle of paintings by Toronto-based artist Gertrude Kearns. Kearns, whose earlier work about the United Nations’ mission in Somalia is now in the collection of the Canadian War Museum, presented UNdone last fall at the Propeller Visual Arts Centre in Toronto. UNdone consists of ten large-scale works painted in sign enamel on camouflage fabric: six head-and-shoulders portraits of General Dallaire, and four monumental figural works depicting scenes of the massacre.

Kearns evokes the sustained nightmare of Dallaire’s Rwandan experience through an intricate combination of formal and symbolic devices. Her approach invites the viewer to respond to the work on both an emotional and an intellectual level. Its