

ALAN GLEASON (Translator)
Who is Fourier? A Mathematical
Adventure

BOSTON: LANGUAGE RESEARCH FOUNDATION, 2006.
430 PAGES

Though I love visiting bookstores, I rarely actually make a purchase because I receive so many publisher freebies. This is true especially true for academic subjects. So it was unusual for me, when browsing the Tattered Cover Book Store in downtown Denver last summer, to buy a book on Fourier analysis.

The cartoon appearance of the softbound book, along with the title, caught my eye. One usually does not associate cartoons with Fourier analysis, a rather advanced and specialized mathematical topic. Unfortunately, it was shrink wrapped, so after casting a few stealthy glances and finding the coast was clear, I removed the wrapper, deftly stuffed it in my pocket, justifying my step into this morally grey area by telling myself “If the book looks good, I’ll buy it.” I bought it on the spot, and I am glad I did.

There are no authors attributed to the original Japanese text. This is because the book was written by a number of students who attend a teacherless university with the dubious name of Transnational College of LEX (TCL). This is a semiformal grouping of people of all ages, whose primary interest is not mathematics, but language. The college consists of “Hippo Family Clubs,” which provide a natural environment for folks to learn up to eleven languages simultaneously (English, Korean, Spanish, German, French, Chinese, Russian, Italian, Malaysian, Thai, and of course, Japanese). The clubs started in Tokyo, spread to other Japanese cities, and now operate worldwide. Students are of all ages, including “youngsters who spent their time running around the room, throwing cushions, and generally ignoring the lectures.” Yet to hear the mothers tell it, “something strange was happening to their kids.” The college promotes immersion and exposure rather than traditional textbook language learning.

Interest in language spawned an interest in sounds made by the human voice (What really makes the five Japanese vowel sounds different from each other?), leading to voice analysis, and then quite naturally to Fourier analysis. The TCL students decided to approach mathematics as just another language to be added on to their list of eleven. Hence, the book is written by non-math-

ematicians who filled it with Japanese animé and rather goofball humor.

The initial chapters (hosted for us by Rie and Kiyomi, along with various stuffed animals) show us the philosophy behind Fourier series and actual waveforms for the five Japanese vowel sounds. The idea of the Fast Fourier Transform (FFT) is presented with a buzzing and squawking FFT analyzer who smiles cheerfully at us from the pages. One could not ask or hope for a more clear and understandable (and entertaining) discourse on this advanced mathematical topic. All too often, even graduate students go through the motions of doing the math without understanding what they are doing and why. That will not happen after Rie and Kiyomi have stepped in.

By the middle of the text, it is necessary to bring in some ideas of calculus. Since this was a new and foreign “language” to be learned by the TCL learners, the concepts of functions, derivatives and integrals are covered in detail (with a host of smiling faces and a cartoon Mr. Newton). These are topics most readers of the book will be familiar with, so this makes for about ninety pages of potentially off-track and uninformative material. It is, however, well presented and suitable for someone learning or wanting to review calculus.

The book gets on track once again with the “Non-Periodic Kid” evading capture by Constable Kogoro. The kid is rounded up finally with help from the complex Fourier integral and the shipping agent’s young daughter, Ohana. The final chapter of the book deals with the Fast Fourier Transform algorithm and its efficiency for dealing with large data sets. This topic was probably a little too tough to chew by the students, and this last chapter I found largely confusing after giving a pretty good description of the discrete Fourier transform. This is, however, the last ten pages or so of the book, so it should not be judged too harshly.

Overall, this was an innovative, clear, entertaining, and mathematically sound book on an advanced and somewhat difficult math topic. While not a textbook, I recommend it as a fun read or a supplement to a standard textbook.

Note: Hippo Family Clubs (which appear now to be called LEX Clubs) are found in several countries and have several publications and language-learning materials for nineteen languages. They also advocate international homestays and hosting to promote friendship and language learning. Activity in the United States seems to be confined to the Boston area. Perhaps some ambitious soul should start one in California some day...

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KEVIN M. KRUSE

*White Flight: Atlanta and
the Making of Modern Conservatism*

PRINCETON, 2005. 352 PAGES

A review of a recent scholarly book on the integration of Atlanta and its discontents might seem a strange companion to an issue of *Pacific Journal* on the environment. It is likely an even stranger choice for a Classicist in California. Perhaps the inclusion is idiosyncratic: this is the environment in which I grew up (and that I rediscovered thorough this book, a chance find in our new books section). Strangely, the older I get, the more I realize how profoundly marked I am by growing up in Atlanta. It is probably trite, but it has required the distance of time for me to understand the land of my youth.

Reading *White Flight* was a valuable experience, because it went a long way toward explaining to me why it was so difficult for me to understand Atlanta: it is a city of paradox. I had always glibly called it the “city of forgetting”—a city that had to debate whether to rebuild Margaret Mitchell’s home—but I have had to face the fact that Atlanta is far more complex than a mnemonic slough. And Atlanta’s moments that were formative for itself and the country today in many cases happened within my (now middle-aged) life.

The book quite rightly starts with the great success Atlanta became in the ‘40s under Mayor Hartsfield. As the country struggled to recover from Jim Crow, Atlanta styled itself with the nickname “the city too busy to hate.” This moniker is easily parodied, what with our obsession with busy-ness over engagement and reflection; however, the motto did mask an unwillingness to grapple with the past in an effort toward reconciliation, and indeed to ask what was really going on in the Southern capital. The work takes a scholarly path, yet captures the changes with an increasingly claustrophobic feel through the accumulation of population shifts, individualism, and suburbia. Indeed, we in California are now dealing with the problems of this shift as we sprawl through agricultural land fueled by four-dollar-a-gallon gas.

Of course we Southerners do remember. A good friend of mine just died, and as I reflected on how he had been such a blessing to me, I realized it was

because he was one of the few fellow products of the Deep South here in the Central Valley. Not only is an external comity born into us, but we always take the long view: we are not too flustered by immediate problems. This can be frustrating to the rest of the country—why are Civil War memorials on every southern square? But it also is valuable: there’s a reason why we elect Southerners disproportionately to the highest office. It can be a strange effect: why do the folks in my mother’s hometown call buildings by names they have not had for fifty years (it was impossible for me to find the *Tourotel*, since it was renamed the *Heart of Jackson*, then torn down and rebuilt as a pharmacy!)? But the busy-ness that prevented remembering specifically prevented remembering the racist past, and thus seeing the effects on the streets of a Southern boom town.

The study is really an admirable work in terms of the breadth of its consideration: it is a social history, but also an economic, political, and geographic anthropology. And they are all effectively covered concurrently. There are masterful transitions between periods and chapters, though perhaps some of them can be too facile. Indeed the only critique of the work that rings very true to me was from one of Kruse’s mentors, who thought that he should have done more with the multiple origins and forms of conservatism in the U.S. The modern conservative movement is much more than the various preoccupations and results of Southern racism (for example, Bush’s “Compassionate Conservative” evangelicalism or McCain’s Southwestern individualism); however, Kruse needs to make a narrative, and he is primarily documenting the origin of this tributary of the stream. And he keeps it discernible and decipherable to the non-specialist. I would add this critique: that this excellent study would be well supplemented with appendices of timelines and key documents.

I am convinced after reading Kruse that cities are most often, or always, run by informal coalitions, and that Atlanta’s combination of white businessmen and black leaders was fairly successful in the ‘40s. It was a rhetorical, and political, coup that rabble-rousers like Lester Maddox (who closed his *Pickrick* restaurant rather than integrate it) managed to redirect people’s energy away from the value of working together, and its concurrent favorable national press, to the notion that somehow poorer whites were being ignored in favor of blacks. The most baneful effect of this growing sentiment is that it led the way to a politics entirely founded on exclusion and redefining communities. It was chilling for me to think that as I was in diapers my community was galvanized in many areas against civil rights, and in two

generations was able to take a deeply flawed Democratic establishment and make it a Republican establishment obviously founded on racist principles.

As I looked at the picture of mid-century, white Georgia leadership, it was true that there was a huge amount of private racism that—if known—would work against public prestige. It is, however, the excellent, though imperfect, relatively transparent system of socio-political checks and balances we have in the U.S. that makes us work well together, like it or not. We are all fallen people, but ones who can be forced by the situation to follow our better angels, and the system had begun to allow progress for blacks at mid-century. It is regrettable that our individualism allowed a toxic way of doing politics in much of the South. One of the key phenomena: neo-Nazi groups became “equal rights” groups. Often the membership of these groups was close to identical, and Kruse has done excellent work on this sort of prosopography and local history. While the attempts at “segregation academies” were largely defeated, there were prominent religious figures on the record supporting them, and using political muscle against clerics who tried to stop them. The heroic figure of Martin Luther King, Jr., was vilified, often in the name of the same Christianity whose values he so clearly embodied. This picture is not brightened by the continuing presence of *de facto* segregation in some Georgia schools.

One of the saddest features of seeing the developments in my hometown over the past half-century is that as movements against black ownership in certain areas gained momentum, they were often explained as the white “community” holding out. In fact, one could rarely find in these groups evidence of real community sentiment (other than resistance to transition), although such sentiment was very present among the close-knit black neighborhoods. Yet the problem was that, with the departure of the whites, the political will on the part of white elites to help the newly black neighborhoods diminished: parks were provided at a fractional level in relation to “white” parts of the city; the schools were disastrously bad. Kruse provides much of the evidence for how these infrastructure changes were forced: barriers were erected; schools abandoned by whites; houses were “mysteriously” torched.

There was great resistance to expanding the city limits, an act that would supposedly cause further disastrous changes. Incorporation of edge communities was thought to hold off the dangers of integration. The bumper sticker of the incorporation drive in my northern Atlanta suburb was “Freedom Rings in Sandy Springs;” a catchy motto—and seemingly American to

its core—but a part of a very troubling view of the city. Certainly humans have always wanted to be exclusive, and watch their own backyard, but in a way this seems to me to be the end of a part of the American lively experiment. And it is certainly not clear how we'll ever reclaim it!

Seeing the changes in Atlanta that were a done deal by the time I became an adult has made me question why we leave center cities—and forced me to develop my own idea of a metaphorical and physical “North.” My life’s journey has placed me in cities that abandon some or all of their core for a suburban movement north: Atlanta, Fresno, Philadelphia; friends have told me of many others. All are finding possibilities for return, though the suburban culture seems entrenched now. As to how prevalent “North” is—and if it is other than pure happenstance—I will continue to ponder. An effect of this interchangeable suburban culture, though, is a permanent placelessness and pushing aside of local character that cannot but render our human experience a little less dynamic, if more comfortable.

In volume two of *Pacific Journal* I mentioned the often terribly underserved communities of blacks that still exist in central Georgia. I do remember that we in the northern part of the city were served by workers carried in one way or another from the southern parts. Little did I know that many of those neighborhoods had been abandoned in short order by whites. There was huge resistance, though, to the idea that we would make the commute easy for them. The heartbreakingly cruel joke I heard in the north was that the name of the system, MARTA, stood for “Moving Africans Rapidly Through Atlanta.” The subway system was built much less fully than it should have been. I was awfully proud of my uncle—a prominent artist—for being willing to be a part of the construction of the stations. Ironically, the areas around some of the stations have become boom neighborhoods. Indeed some, such as Inman Park, have witnessed a significant return of whites to the area!

Southerners are not alone in being guilty of irreconcilable diachronic notions that result in synchronic blindness. The talk-show host Bill O'Reilly was famously surprised to find dining in a Harlem restaurant to be an experience of pleasant and cultured society. Southerners, though, still have some obvious obstacles of their own to overcome: Is it really believable that we need to keep Confederate flag symbolism in use—especially when it was often included in the middle of the TWENTIETH century? Allusions to states' rights and proud heritage only seem to be echoes of similar rationale that appeared before school integration.

It is unfortunate that we are not getting past the problems this epoch has

created—Kruse is right that they have in some ways been nationalized, and they won't be easy for us to escape. He quotes K. Jackson (p. 244): "Because of public policies favoring the suburbs, only one possibility was economically feasible. The result, if not the intent, of Washington programs has been to encourage decentralization." The flip side of the coin is also troubling: CNN this winter included an article (cnn.com3.1.08: "GA's first black police officers move to take pension battle to court") on how black police officers are having to fight for their pensions—they were not allowed to join the fund until the '70s. Now Georgia is trying to block their being added because no one can increase benefits after retirement. We in California know the dangers of allowing such practices—a part of our fourteen-billion-dollar shortfall—but when used to support clear mistreatment, such administrative conservatism is horrifying. As one police retiree said, the state has an easy solution: wait until they all die. This case was especially devastating to read after Kruse's account of the trials of the desegregation of the force that allowed these men to serve.

There is much evidence that these remaining problems are not simply administrative. I still hear Georgians outside of Atlanta talk about how the blacks are trying to work the system for themselves. Atlanta's mayors have been black for most of the last thirty years, but there are many who take that reality as a symptom of the white abandonment of the city. The most dramatic illustration of the ongoing racial divergence was the division in reaction to the Michael Vick (Atlanta Falcons quarterback) trial (espn.com8.8.07 ran a very good article on the subject: "A History of Mistrust"). In spite of the horrendous crime he was charged with—heartlessly abusing dogs—there was a huge amount of support for him in the black community. Now, perhaps the support was in a desire for justice to take its proper course (and some support for a sports hero), but it also happened that he was tried in a city that had seen atrocities done to blacks in the name of the law. That history does not allow an easy interpretation of a contemporary event; the memory and long view that is the heritage of the South must be increasingly used to understand and honor this context.

I am appalled that my community did not make individuals such as jailed pastors and student activists heroes in my youth, but perhaps we have learned something from them: integration and equal access have notably progressed. But have we learned enough? Is there still a strain in U.S. conservatism that is simply a renaming of racial exclusivity? If so—and the push polling about John McCain's adopted child in the 2000 election indicates that the strain

exists—it indicates a divide between liberal and conservative that need not exist. “White Flight” and the various social conditions that attach to it may become a dinosaur in our increasingly poly-toned world, but we need the careful work of scholars like Kruse to attune us to social realities, those both historical and still among us.

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