Private Journeys on Public Maps: A Look at Inscribed Road Maps[1]

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The exchange of gestural and sketch maps remains one of the most common uses of cartographic representation, despite the fact that printed maps—and now, their digital and broadcast counterparts—are all around us. Common sense supports this assertion, but precious little historical scholarship has addressed the history or nature of ephemeral, informal, or private cartography in modern print cultures. This paper examines twentieth-century American road maps and mapping practices that lie on the cusp between the manuscript and the printed, the public and the private. These practices prompt a reconsideration of the usefulness of these distinctions in the history of cartography and of the traditional emphasis on the end-products of the cartographic process over the use, both public and private, of maps.

Each of us has made our own rough manuscript maps in passing, perhaps explaining to a friend or acquaintance how to get to our home, or where to find the nearest post office. These maps, soon discarded and forgotten, are nevertheless an important part of human cartographic experience. The exchange of gestural and sketch maps remains one of the most common uses of cartographic representation despite the fact that printed maps—and now, their digital and broadcast counterparts—are all around us. Common sense supports this assertion, but precious little historical scholarship has addressed the history or nature of ephemeral, informal, or private cartography in modern print cultures.

The main barrier to the study of ephemeral and private mapping is the traditional propensity of cartographic theory and historiography to focus on the end-products of the mapping process—on artifactual maps (whether in print or manuscript) rather than the process itself. This orientation inevitably turns historical scholars' attention towards maps with outstanding technical merit or innovative qualities, or maps that break new geographical ground. The tendency to view the history of cartography as a narrative of scientific progress is thus reinforced (Edney 1993) and along with it the notion that, in the modern context, only maps produced by the most highly trained cartographers really matter. Rundstrom (1991) has argued that artifactual maps are simply the traces of an ongoing process of mapping and exchange of geographical ideas, which should be at the core of cartographic studies. Taken to its logical conclusion, Rundstrom's argument blurs the distinction traditionally made in cartographic studies between map "makers" (those with the skills, knowledge, and authority to make maps) and "users" (their audience). Applied to the history of later modern cartography, it would also break down the implied distinction between public professional mapping and more ephemeral or informal private mapping exchanges. Amid recent calls for more extensive study of the history and culture of map use (Jacob 1996), it should go without saying that cartography is not a closed enterprise open only to the professionally trained or to those with access to the means of publication. Despite a

century of scholarship dedicated to establishment of cartography proper as a professional realm with its own rules and standards, everyday people with no particular skill or credentials have continued to make maps for their own use or for others, with serviceable results. It is in fact likely that increased exposure to map images and access to geographical information, skills, and technology during the nineteenth and twentieth centuries has dramatically increased private access to cartographic communication, thus making any distinction between private and public cartography essentially meaningless.

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A history of the cartographic process melding map making and map use would also blur a related distinction traditionally made between printed maps (as "finished" products) and manuscript maps (as "unfinished" cartography). An entire series of the Kenneth Nebenzahl, Jr., Lectures in the History of Cartography, held in 1985, for example, examined the sources (mostly manuscript maps) of celebrated examples of early modern European cartography. The lecture series' title, "Maps in the Making: The Various Sources of Printed Maps," betrays the prevailing scholarly view of manuscript maps as the poor relations of printed maps.[2] This view rests on the contention articulated by Marshall McLuhan (1962) and Elizabeth Eisenstein (1979) that the exact duplication and wide distribution of works of all sorts made possible by the advent of printing enhanced their authority and even created the concept of authority itself. By implication, maps remaining in manuscript, or communicated by gesture or oral communication, lack authority and weight. This thesis has been recently challenged by Adrian Johns (1998), who argues that the authority of print was more likely constructed by those who had a stake in the success of printing and its products (such as printers, booksellers, and scientists) than it was inherent in the standardizing and publicizing characteristics of print.

Of course, cartographic historians have not dismissed manuscript cartography as meaningless or irrelevant. The Harley-Woodward *History of Cartography* has already filled four books of rich scholarship on cartography generated either before the introduction of printing to mapmaking in Europe or outside of modern European print culture (Harley and Woodward 1987). Kain and Baigent's (1992) study of modern cadastral mapping concerns a mapping form that was predominantly manuscript during the seventeenth through the nineteenth centuries, and exists on the edges of printed mapping to this day. American indigenous cartographies, largely preserved in the form of manuscript exchanges with European or Euroamerican explorers and colonial officials, have been the subject of two recent books (Lewis 1998; Warhus 1997). And in *Monarchs, Ministers, and Maps*, Buisseret (1992) and his collaborators related the extensive use of both printed and manuscript cartography by the early modern state and have even pondered some of the reasons why certain maps remained in manuscript and others found their way into print. It is worth noting, however, that the vast majority of studies of manuscript cartography in modern Western contexts examines this cartography in light of its public functions, such as the role they play in state administration, empire building, or property management. It is their public function that has leant these maps authority as artifacts and that has, not coincidentally, insured their survival in state archives or research libraries.

Extensive study of more private ephemeral cartographic exchanges will be hindered by the difficulty of obtaining evidence from private individuals. It is certainly true that public archives and research libraries have been slow to collect casually made maps, except as they relate to public figures and functions. Such evidentiary problems are not easily dismissed, but this paper's examination of three related types of private road mapping

practices in the twentieth-century United States suggests that the evidence of private mapmaking and map use does exist for those who will look for it. In my studies of American road mapping I have come across a number of examples of maps and mapping practices that lie on the cusp between the manuscript and the printed, the public and the private. They prompt a reconsideration of the usefulness of these distinctions in the history of cartography. I shall begin by examining how manuscript annotations to printed road maps add private and personal meaning to public documents. Then I will demonstrate how early American motorists, mapping in a private capacity and primarily for their own amusement, effectively transformed their private interpretations and reconnaissance of the landscape into mappings that made a significant contribution to the initial public understanding and layout of the United States' emerging system of automobile highways.

INSCRIBED ROAD MAPS

Sometime after 1973, a woman named Inga annotated a printed map showing a district of western Connecticut, quite near the state boundary with New York, with her own map showing the approach to her house from the southeast (Figure 1). A close reading of the annotations provides some clues about the circumstances in which they were made. "Looking forward to seeing you both!" Inga writes at left center, just above their lakeside home, intimating that her map was intended for a pair of close friends or relatives preparing for a visit. At the lower far right of the map (see Figure 1), Inga self-consciously refers to the amateur character of her draftsmanship, and yet betrays a certain measure of pride in having made the map: "I may not be neat I'm efficient! Inga." At points where turns are required Inga identifies landmarks that will orient the travelers at critical points in the journey (e.g., the store and clock tower in central Sharon, where they are to turn north, and the shopping center and post office, where Low Road, the final approach to Inga's house, diverges from Route 41). There is even a witty warning that they should "drive well on right side of road . . . natives are dangerous drivers." To the north of the home, Hotchkiss School, at the intersection of state routes 41 and 112, is circled, and identified as a preparatory school for Yale University. Is this school part of the reason for the visit? Alas, the map does not support further speculation about the circumstances of Inga's inscriptions, but what interests us here are not the specific details of the journey that generated them, but rather the lived-in and personal nature of the mapping.

"Most road map collectors will discard annotated 'duplicates,' because they view these as marring the quality of the item."

In the world of map collecting, usually the greatest value among otherwise identical printed items is accorded to those that are in the best condition. This axiom applies equally to tears, stains, and excessive stray marks or annotations, except (not surprisingly) when the annotations are by famous hands. Most road map collectors will discard annotated "duplicates," because they view these as marring the quality of the item. The Newberry Library, for example, acquired the inscribed map reproduced as Figure 2 from a Minnesota-based collector who was willing to part with it because he had acquired a cleaner copy. The printed map dates from about 1923 and was published by Rand McNally for distribution by the Minnesota Retail Hardware Association, whose members sold camping and fishing supplies to tourists. Towns with stores belonging to the association are marked by orange dots on the map. This in itself was a form of corporate annotation; the base map of the Minnesota auto trails was a generic Rand McNally product, which the firm customized for different corporate clients—in this case the Minnesota Retail Hardware Association—to suit their particular promotional needs. There was further pre-consumer customization of this copy of the map in the form of orange overprinting on

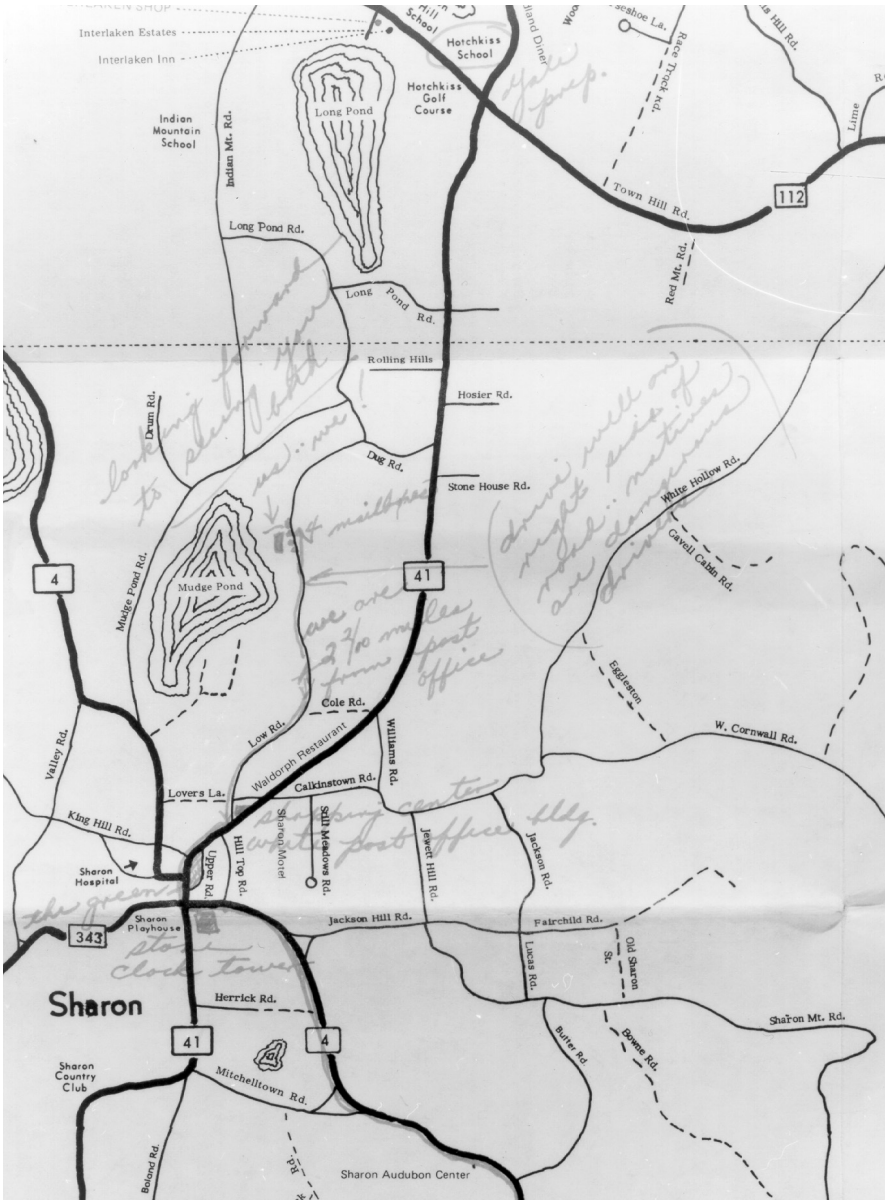

Figure 1. Detail of Albert Borden, New York, Connecticut, Massachusetts Tri-State Area Maps *(Amenia, NY: The Link Line Co. for Albert Borden, Lakeville, CT, 1972), annotated by "Inga". Courtesy of the Newberry Library.*

". . . the hardware chain and C. C. Bruscke were both consumers *of Rand McNally's map (and the advertising service it offered) and* publishers *with Rand McNally of its specific printed content."*

the front cover of the map indicating that it was distributed "compliments of C.C. Bruscke & Son," a hardware store in Good Thunder. Presumably, C.C. Bruscke had available for distribution during the 1923 season a stock of one or two hundred of these maps bearing their name, out of several thousand Rand McNally likely printed for the hardware association. These steps in the publication and distribution process would have been unobserved by most consumers, who perceived only a printed road map with information about hardware stores on it. The point nevertheless undercuts any simple distinction between map maker and consumer: the hardware chain and C. C. Bruscke were both *consumers* of Rand McNally's map (and the advertising service it offered) and *publishers* with Rand McNally of its specific printed content. The anonymous tourist-inscriber was likewise a consumer of the map and a map maker.

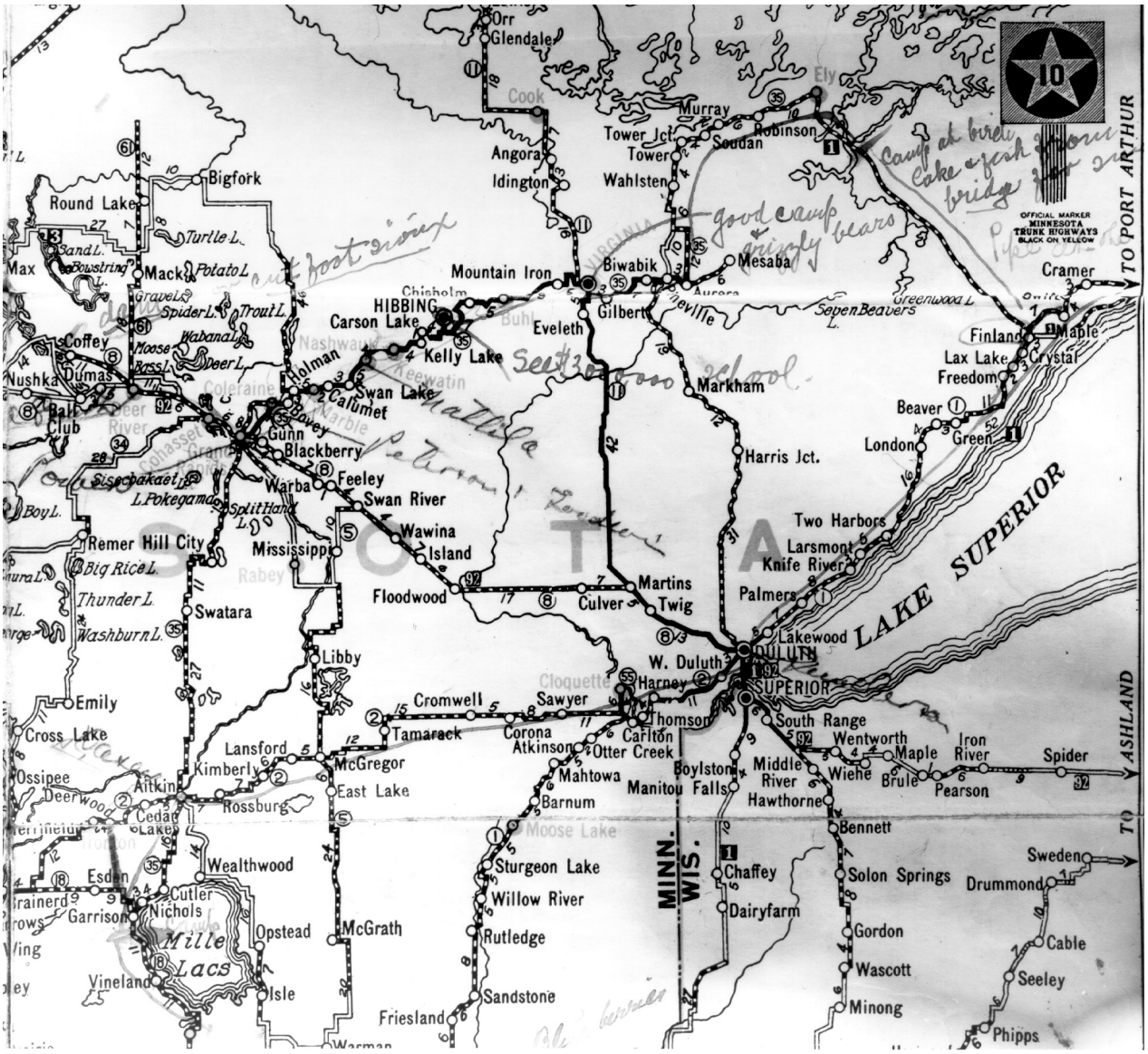

Figure 2. Detail of anonymous annotations, Auto Trails of Minnesota . . . Prepared Especially for Minnesota Retail Hardware Association *(Chicago: Rand McNally for the Minnesota Retail Hardware Association, 1923?). Courtesy of the Newberry Library.*

We have no idea who, in fact, made the manuscript annotations. We deduce that the tourist or tourists began their journey in the twin cities of Minneapolis and St. Paul, or somewhere further south; for a red inked line begins there that traces the route of an automobile journey northward into the lake-infested land west of Lake Superior and south of the Canadian border (what is known as the Minnesota Arrowhead). Our detail (Figure 2) includes manuscript annotations that relate highlights of the trip. Near Ely, the party camped by a birch tree and fished for sunfish from a bridge. Near Virginia, the party was impressed by its encounter with grizzly bears. Down the road, at Hibbing, in the heart of the Mesabi Range mining region, they were impressed by a "$3,000,000 school," likely the Hibbing Technical and Vocational High School, then "the second largest of its kind in the United States" (Minnesota Writers' Project 1941, 132), which opened in 1923. Many of the notes are indecipherable, but it is clear that they were intended to support personal recollection of the trip and possibly also a private retelling of its story to family friends. The mere survival of the

artifact to the present day suggests that it had some role through the years as a souvenir.

A third example of road map inscription is a map of the entire United States published by the Keystone Automobile Club and neatly labeled "Our Trips" on the front cover (Figure 3). The map meticulously records the routes of five lengthy automobile journeys, taken every year from 1934 to 1938. The record of travel is truly impressive. In these five years our Philadelphia-based tourists traversed every state then in the union, excluding Oklahoma and North Dakota, as well as part of Canada and Mexico. The total distance traveled on these five trips likely would have been in the order of 20,000 miles. The care with which the map was compiled reveals the travelers' pride in these trips and their affection for their memory. Yet, again, the map alone tells us little about its inscribers, except that perhaps they possessed sufficient wealth to support five extensive pleasure trips during the Great Depression.

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Though charmingly personalized, these examples of inscribed road maps tell us tantalizingly little about their authors or the events they record. I find myself wanting to know more about the trip narratives recalled each time they were unfolded. These narratives are lost to us, but anyone who has huddled over the souvenirs of a past trip, either with a friend or in personal reverie, might imagine their nature and content. The uneven record of surviving copies of these inscribed maps leaves another doubt: are these isolated examples of an unusual map use, or representatives of a widespread practice among American motorists? At least one class of a more institutional form of American road mapping suggests that the demand for personal cartographic records was in fact considerable.

PERSONALIZED ROAD MAPS FROM INSTITUTIONAL SOURCES

American motoring tourists' affection for personalized road maps was also satisfied by institutions such as the American Automobile Association (AAA) and its local affiliates, and by travel bureaus jointly organized by oil companies and cartographic publishers. The AAA has provided travel information as part of its basic service to members since its inception in 1901. It became involved in the publication of navigational guides in 1906, when it endorsed as an official AAA publication the route guides prepared by the Automobile Blue Book Company. These massive volumes numbering several hundred pages each provided hundreds of detailed mile-by-mile verbal logs of recommended routes for travel between major cities and towns (Figure 4). During the 1910s, the AAA began publishing its own maps and simple cardboard route logs. During the post-World War II boom in leisure motor travel, these evolved into more elaborate route planners called "Triptiks."

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Each Triptik is a small booklet of strip maps providing an easily followed detailed route map of an itinerary requested by an individual consumer. The cartography in the Triptik depicted road segments, major cities, and tourist destinations, and was selected by AAA employees from an inventory of hundreds of preprinted maps. AAA employees assembled the Triptiks following itineraries already established. For example, the route suggested by AAA employee Michael Caplan to John H. Spencer in 1968 required sheets 706 (Boston), 104 (Boston-Greenfield, Mass.), 105 (Greenfield, Mass.-Albany, N.Y.), 702 (Albany), and 106 (Albany-Richfield Springs, N.Y.). The Triptik booklets were assembled in a highly routinized and mechanical way, but consumers received a little atlas of their proposed trips that seemed personal, an impression reinforced by a hand-inked line tracing the consumer's proposed route on the printed sheet (Figure 5). One frequently finds examples of Triptiks that have been further personalized by the consumer. The example reproduced in Figure 5 depicts roads linking Montgomery,

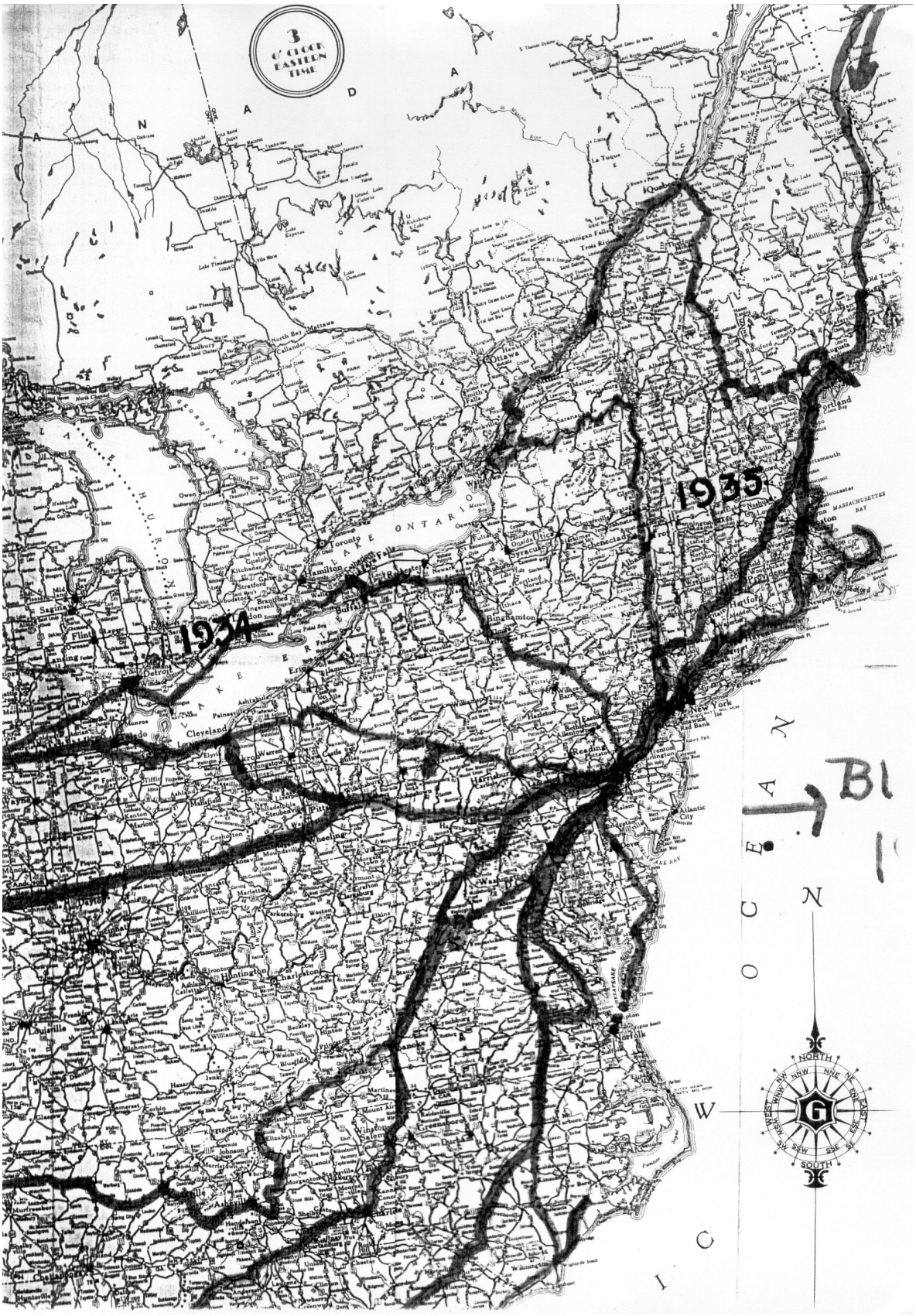

Figure 3. Keystone Automobile Club/Gallup's Transcontinental Highway Map of the United States, Canada & Mexico *(Kansas City: Gallup for Keystone Automobile Club, Philadelphia, 1934?), annotated anonymously to 1938. Collection of the author.*

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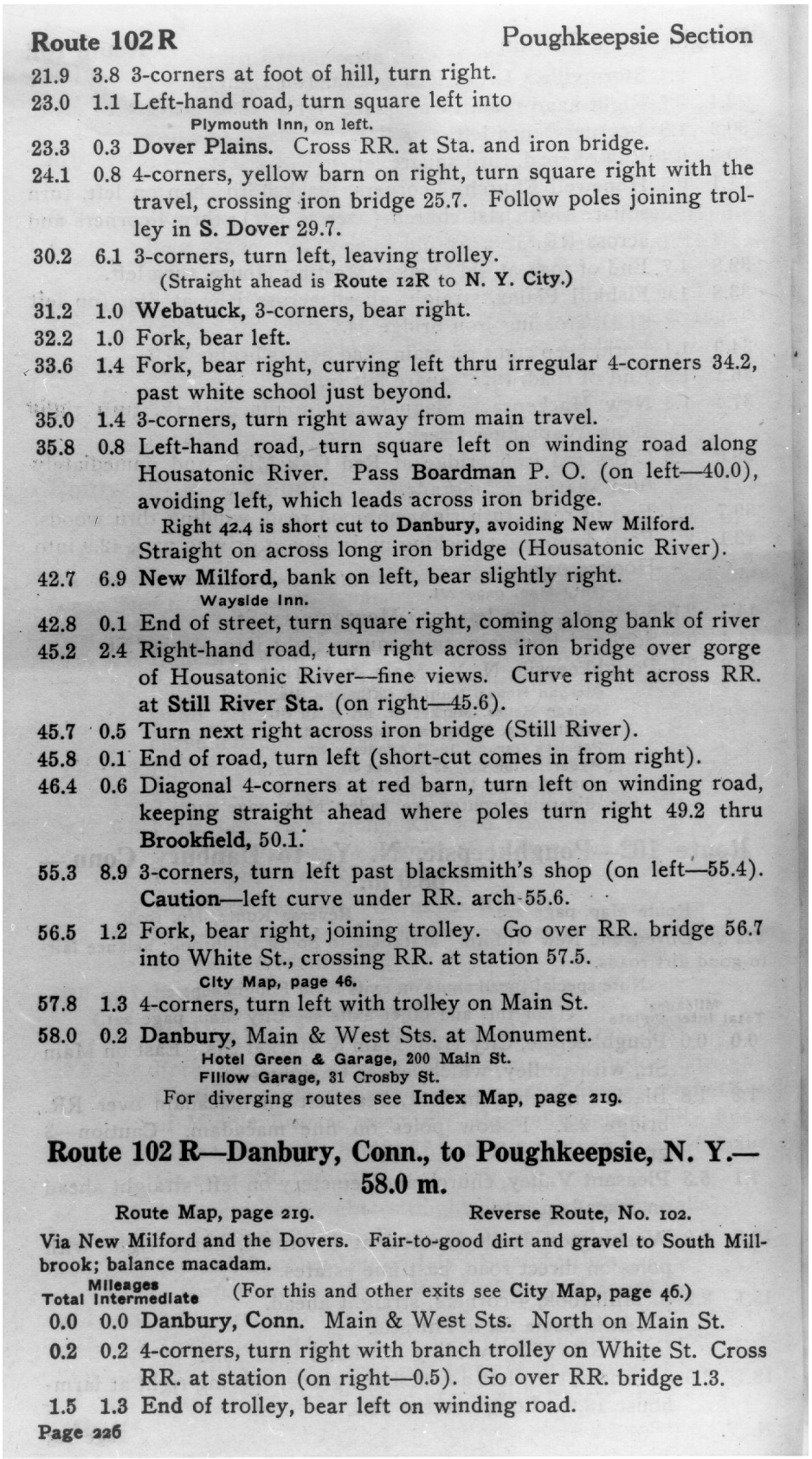

Route 102 R Poughkeepsie Section

21.9 3.8 3-corners at foot of hill, turn right.
23.0 1.1 Left-hand road, turn square left into
Plymouth Inn, on left.
23.3 0.3 **Dover Plains.** Cross RR. at Sta. and iron bridge.
24.1 0.8 4-corners, yellow barn on right, turn square right with the travel, crossing iron bridge 25.7. Follow poles joining trolley in **S. Dover** 29.7.
30.2 6.1 3-corners, turn left, leaving trolley.
(Straight ahead is **Route 12R** to **N. Y. City.**)
31.2 1.0 **Webatuck,** 3-corners, bear right.
32.2 1.0 Fork, bear left.
33.6 1.4 Fork, bear right, curving left thru irregular 4-corners 34.2, past white school just beyond.
35.0 1.4 3-corners, turn right away from main travel.
35.8 0.8 Left-hand road, turn square left on winding road along Housatonic River. Pass **Boardman** P. O. (on left—40.0), avoiding left, which leads across iron bridge.
Right 42.4 is short cut to **Danbury,** avoiding New Milford.
Straight on across long iron bridge (Housatonic River).
42.7 6.9 **New Milford,** bank on left, bear slightly right.
Wayside Inn.
42.8 0.1 End of street, turn square right, coming along bank of river
45.2 2.4 Right-hand road, turn right across iron bridge over gorge of Housatonic River—fine views. Curve right across RR. at **Still River Sta.** (on right—45.6).
45.7 0.5 Turn next right across iron bridge (Still River).
45.8 0.1 End of road, turn left (short-cut comes in from right).
46.4 0.6 Diagonal 4-corners at red barn, turn left on winding road, keeping straight ahead where poles turn right 49.2 thru **Brookfield,** 50.1.
55.3 8.9 3-corners, turn left past blacksmith's shop (on left—55.4). **Caution**—left curve under RR. arch 55.6.
56.5 1.2 Fork, bear right, joining trolley. Go over RR. bridge 56.7 into White St., crossing RR. at station 57.5.
City Map, page 46.
57.8 1.3 4-corners, turn left with trolley on Main St.
58.0 0.2 **Danbury,** Main & West Sts. at Monument.
Hotel Green & Garage, 200 Main St.
Fillow Garage, 31 Crosby St.
For diverging routes see **Index Map, page 219.**

Route 102 R—Danbury, Conn., to Poughkeepsie, N. Y.—58.0 m.

Route Map, page 219. Reverse Route, No. 102.

Via New Milford and the Dovers. Fair-to-good dirt and gravel to South Millbrook; balance macadam.

Mileages Total / Intermediate (For this and other exits see City Map, page 46.)

0.0 0.0 **Danbury, Conn.** Main & West Sts. North on Main St.
0.2 0.2 4-corners, turn right with branch trolley on White St. Cross RR. at station (on right—0.5). Go over RR. bridge 1.3.
1.5 1.3 End of trolley, bear left on winding road.

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Figure 4. Detail of a page from an Automobile Blue Book. *Rand McNally Collection, the Newberry Library.*

Alabama to Tallahassee, Florida in 1971. The motorist's own annotations meticulously record the rhythms and details of the day's travel. Periodic annotations record the passage of time and miles, and even eating lunch at a rest stop in Quincy, Florida, at 12:58.

Some American oil and tire companies offered travel information to their customers from the mid-1910s—notably B.F. Goodrich and Gulf Oil (Ristow 1964; Yorke and Margolies 1996). By the late 1920s cartographic publishers such as Rand McNally, H.M. Gousha, General Drafting, Mid-West Map, Gallup, and Clason had made the annual production of millions of road maps for free distribution by corporate clients a mainstay of their business. Increasingly, these clients were almost exclusively oil companies. Then as now, the production and distribution of gasoline and motor oil comprised a highly competitive industry. Yet the quality of petroleum products varied little from producer to producer, so the development of a positive and distinctive corporate image was important. By the early 1930s the free distri-bution of road maps to service station customers had become part of a standard corporate strategy designed to encourage consumer loyalty practiced by almost every major oil and gas retailer (Jakle 1994; Yorke and Margolies 1996). Many of the larger companies raised the ante by establishing travel bureaus that offered travel advice and produced customized route plans. In this they were actively encouraged by the emerging "big three" of American road map publication—Rand McNally, H.M. Gousha, and General Drafting—who saw the travel bureaus and their specialized products as yet another way to increase demand for their own cartography.

Figure 5. Detail of Triptik *prepared by the Chicago Motor Club for an anonymous motorist, 1971. Collection of the author.*

Many of the customized route plans generated by these services were simply standard road maps on which the patron's route was traced in colored ink. Others, such as the "Touraides" published by Continental Oil (Conoco) in partnership with H.M. Gousha, represented a significant corporate investment in the development of special map editions and accompanying travel information. Conoco introduced its Touraides in 1936 (Edwards 1936). During its heyday from the 1930s through the early 1960s, the Touraide was a spiral-bound 8.5 x 11- inch booklet that included sectional maps (Figure 6), listings of accommodations, and brief synopses of major sites, cities, and tourist attractions. Like the Triptik, the sequence of maps in the Touraide provided a complete itinerary of the proposed trip, with specific suggested routes traced on the map. Further patron personalization of the trip record was also encouraged by the provision of a chart for logging miles traveled and recording places visited, events, and expenses.

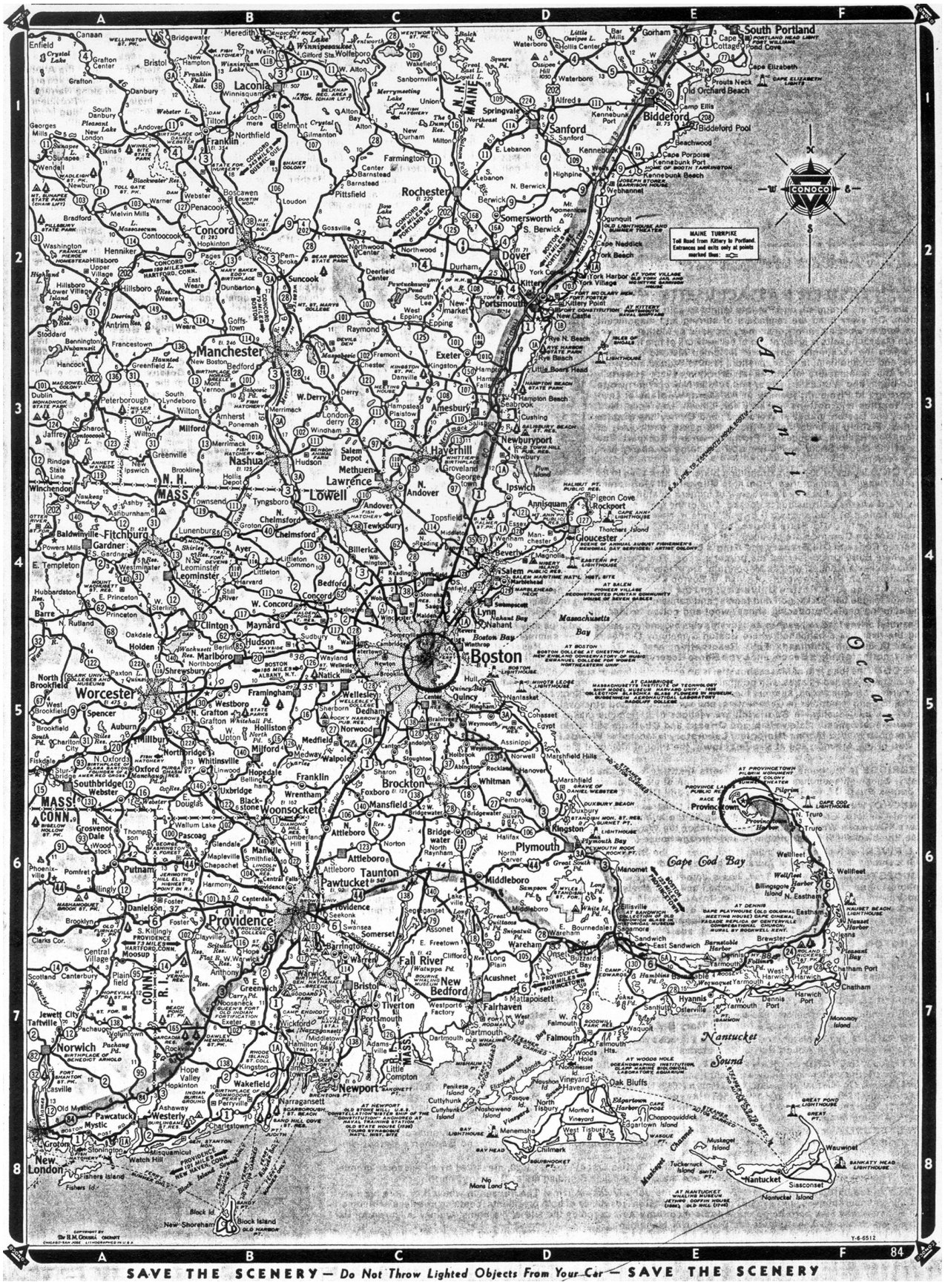

Figure 6. Sectional map of Eastern Massachusetts, Rhode Island, and Southeastern New Hampshire from Touraide Prepared Especially for Marjorie Hennigsen *(Denver: Continental Oil Co., 1952). Collection of the author.*

One of these charts (Figure 7) from a Touraide prepared in 1937 for Evelyn B. Fronell of Chicago documents a two-week excursion to Colorado by carefully recording the cost of gasoline fill-ups, frequent greasings, and many nights' lodgings. In the midst of the Depression, even the indulgences of a cherry cider and a Coca-Cola were not judged insignificant. Fronell's traveling companion, E.M. Nixon, has annotated the log at center right with the affirmation: "I hereby certify that Evely[n] B. Fronell is a AA1 Driver."

Like the Triptik, the Touraide differed from maps inscribed by map consumers themselves in one respect: its inscriptions carried the stamp and authority of a major mapping corporation and the supposedly profes-


MILEAGE AND EXPENSE RECORD

DATE	TOWN AND MILEAGE	GAS	OIL	COST	MEALS	LODGING	MISCELLANEOUS EXPENSES
7-20	Kearney Nebr						Tire Repair 50
7-20	" "				.30		
7-20	" "	8		1 37			
7-20	Hastings Nebr						Cherry Cider .10
7-20	Big Springs Nebr	8½		1 77	.30		
7-20	Ft Morgan Colo						Coke .05
7-20	Denver Colo	9		1 87	.70		
7-20	" "			5 01	1.30	1 00	.65
7-20	Total						7.96
7-21	Colo Springs Colo				.85	.75	
7-22	" " "					.75	
7-23	" " "						film .30
7-23			5 incl				Greasing 2.50
7-23	Palmer Lake Colo	5		1 05			
7-23	Denver Colo					1.00	
7-24	" "	7		1 74			
7-25	" "					.75	
7-26	" "	8		1 76			
7-27	Estes Park "	4		1 00			
7-28	Grand Lake Colo						2- films .37
7-28	Grand Lake Colo	9		1 44			
7-29	Sidney Nebr	5		1 08			
7-29	Odell Nebr					.75	
7-30	" "	9½	1.30	2 36			
7-30	Kearney "	7½		1 46	.30		
7-30	Blair "				.30		Toll Bridge .55
7-30	Fonda Ia	5		90			
7-30	Carroll Ia				.65		Dinner
7-30	Jefferson Ia	9		1 62			
7-30	Boone Ia					.50	
7-31	Boone Ia		5	1 25			Greasing 1.00
7-31	Cedar Rapids Ia	9½		1 70			
7-31	Clinton Ia						Toll Bridge .25
7-31	St Charles Ill						Soda .15
7-31	Chicago Ill	5		95			
	TOTALS						

I hereby certify that Evelyn B. Fronell is a AA1 Driver signed E.M. Nixon

TOTALS

Figure 7. "Mile and Expense Record" from Conoco Touraide Prepared Especially for Evelyn B. Fronell *(Denver: Conoco Travel Bureau, 1937). Annotated by Evelyn B. Fronell July 18-31, 1937. Collection of the author.*

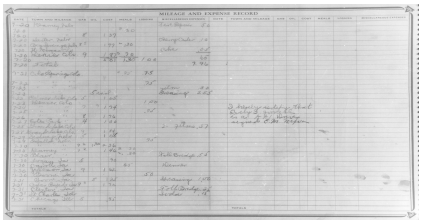

Figure 8. Detail of cover of Touraide Prepared Especially for Marjorie Hennigsen *(Denver: Continental Oil Co., 1952). Collection of the author.*

sional staff of a travel bureau. A promotional page on the back of a 1951 Touraide declared that making a Touraide required "125 experts, each highly trained in his own job, [performing] 19 operations, each requiring a special skill" (Continental Oil Co. 1952). The rhetoric of the ad was meant at once to impress the consumer with the scale and expertise of the operation and to stress the personalized nature of the final product, which was completed by the "hand-lettered" name appearing on the cover (Figure 8). The high volume of requests for Touraides—up to 4,000 per day, according to the advertisement—required that they were prepared by a process that was highly routinized and allowed the "experts" little room (or time) for individual judgment or sentiment, and ultimately produced a product that was personalized in "hand-lettered" name only.

The producers of Touraides and Triptiks and other products tried to flatter their patrons by asserting each of these customized atlases was in some sense their own. It's doubtful that many consumers accepted this rhetoric at face value. In his wry travelogue, *The Air-Conditioned Nightmare*, Henry Miller observed that "At the Automobile Club in New York I remember the fellow taking a greasy red pencil and tracing a route for me backwards while answering two telephones and cashing a check" (Miller 1945, 210). Yet travelers like Evelyn Fronell and her companion did take up Conoco's invitation to make their Touraides their own, transforming them into their own maps and into souvenirs. More generally—and ironically—these products may have reinforced motorists' sense of personal control over their itineraries. Though personalized travel aides told motorists *how* to conduct their proposed journey, the individuality of the each Touraide and Triptik emphasized the unique nature of each trip, reinforcing each motorist's sense—or illusion—of control over one's travel choices. This was something that the rigid schedules of routes of trains and buses could not offer, and was critical to the emergence of car travel as a popular American recreation.

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Whether created privately or "professionally," inscribed road maps both challenged and contributed to the authority of the printed road map. The printed network of lines and intersections, sites, towns, route distances, and boundaries provided an adequate background for the personal travel experience. To this, map inscribers and consumers of route planning aides added something of themselves. Their inscriptions and hand-drawn itineraries represented a personal remapping of the roadscape that reaffirmed the truth of the printed map by confirming that routes it plotted could indeed be driven. At the same time, consumers' inscribed traces of their travel experiences and impressions enlarged, altered, and corrected the assertions of the map. In this way, consumer inscription of maps echoed the strong independent mapping impulses of early American motoring tourists, to whose efforts we will now turn.

ASSOCIATION HIGHWAYS AND PATHFINDERS' MAPS

One of the most intriguing aspects of early automobile road mapping in the United States is the extent to which it was organized by private organizations and individuals who had no previous experience or reputation as cartographers. Until the passage of the first federal road aid act in 1916, there was little federal or state governmental involvement in the construction and maintenance of highways. Most of the road improvements necessary to support the new mode of overland travel were performed on a local basis. Consequently, any motorist wishing to take longer trips from state to state or across the entire country had few highways worthy of the name to support this travel, and only a string of bad-to-indifferent county and local roads along which he or she somehow had to navigate. Many fine road maps existed for local districts and for some states, particularly

in the northeast, where the roads were traditionally quite good. Cross-country motorists in this period, however, literally had to imagine their own highways, and to map them on their own, often with little help from local authorities.

Not that this deterred the more intrepid travelers. The first transcontinental automobile trip was achieved in 1903, and one estimate held that between five and ten thousand motorists traveled from coast to coast along a single route, the Lincoln Highway, in 1916 (Joy 1917). Compared to the millions who would go motor camping annually in the 1920s (Belasco 1979), these numbers were still small, but they were encouraging to automobile manufacturers and other business interests who stood to profit from the expansion of automobile travel. Along with motor clubs, these interests took the lead in forming scores of highway associations, which were concerned with the creation, marking, and improvement of specific interstate and transcontinental routes. The majority of these highways were eventually incorporated into the numbered state highway systems that were developed in the 1920s, or into the system of numbered federal highways created in 1926. The most successful of these association highways was the Lincoln Highway, an east-west transcontinental route (New York to San Francisco) first proposed in 1912 by a group of automobile and auto parts manufacturers based in Indiana and Michigan, and formally opened in 1915 (Lincoln Highway Association 1935). Most of the association highways bore similar patriotic names or geographical names referring to origins and destinations. The highway associations published maps that promoted their routes to potential tourists, but these highly generalized maps had little practical value to motorists, since none of the private associations had the financial resources to make the road improvements that would make them the rapid through routes the associations envisioned. The highway associations did take responsibility for marking their routes in the field, a necessary precondition to detailed mapping, yet this work was often incomplete (Akerman 1993a, 1993b). A guidebook published by the Lincoln Highway Association in 1916, one year after the official opening of the highway, revealingly confessed that in "many places this marking is not as thorough as it should be. . . . [nevertheless] it is possible to find one's way across the country on the Lincoln Highway without the necessity of making inquiries" (Lincoln Highway Association 1916, 7). The guide itself was of little help. It included a general map of the route and a verbal "log" listing the towns along the route, distances between them and their distances from the highway's termini. But since neither map nor log provided the essential navigational information that motorists needed to get from town to town, early travelers on the route indeed had to rely on making local inquiries. However, larger scale orientation maps to each state were added to later editions (McKenzie 1963, 20-22).

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The case of Emily Post, a columnist for a New York newspaper, and later the leading American published authority on proper etiquette, gives us some idea of the navigational information routinely available to motorists. In 1915, she planned with her editor, on very short notice, a transcontinental journey by car from New York to San Francisco. Her published account of this journey, *By Motor to the Golden Gate*, relates a frantic search for reliable information about the roads she might travel. Nothing concrete was to be had at any of the standard travel agencies. The 1915 edition of the standard reference in use at the time, the *Automobile Blue Book*, had not yet been published, and the 1914 edition was out of print. Told "that the best information was to be had at the touring department of the Automobile Club," Post resolved to enlist their help. But the "polite young man" she encountered there confessed that the bureau seemed "to be out of our

Western maps," and proceeded to urge upon her the standard and more genteel New Yorkers' tour of rural New England. At length the conversation passed to the suitability of the Lincoln Highway and of the Santa Fe Trail farther south, which was generally conceded to offer the safest way across the mountains and deserts of the American west. Of particular concern was the Arizona desert. " 'Can we get across that?,' " she asked the polite young man. "'That *is* the question,' " was his answer, prompting Post to observe that "'Perhaps we had better just start out and ask the people living along the road which is the best way farther on?' The young man brightened at once. 'That would have been my suggestion from the beginning.' " (Post 1916, 5-6).

"Post's publication of her personal cartography may strike us as presumptuous today, but it also reveals the extent to which early American motor tourists had to make and map their own highways, particularly on Western trips."

This exchange explains why Post herself felt compelled to attach to the end of her book a series of seventeen maps showing the entire route of her journey with historical notes, navigational suggestions, and information about accommodations (Figure 9). Post's publication of her personal cartography may strike us as presumptuous today, but it also reveals the extent to which early American motor tourists had to make and map their own highways, particularly on Western trips. The publishers of a small and flimsy 1914 map of another Western highway, the Yellowstone Trail, were far more honest in this regard than the Lincoln Highway guide. This route, promoted by the Twin Cities-Aberdeen (S.D.) and Yellowstone Park Trails Association, was intended to route traffic from the East to the famous national park through towns in northern South Dakota—most prominently Aberdeen. Crudely drafted by an unknown hand—perhaps that of the association's president, J.W. Parmley of Ipswich, S.D., who held the copyright—and printed by the News Printing Co., the map is informal, like many others from this period, emerging from no established state or

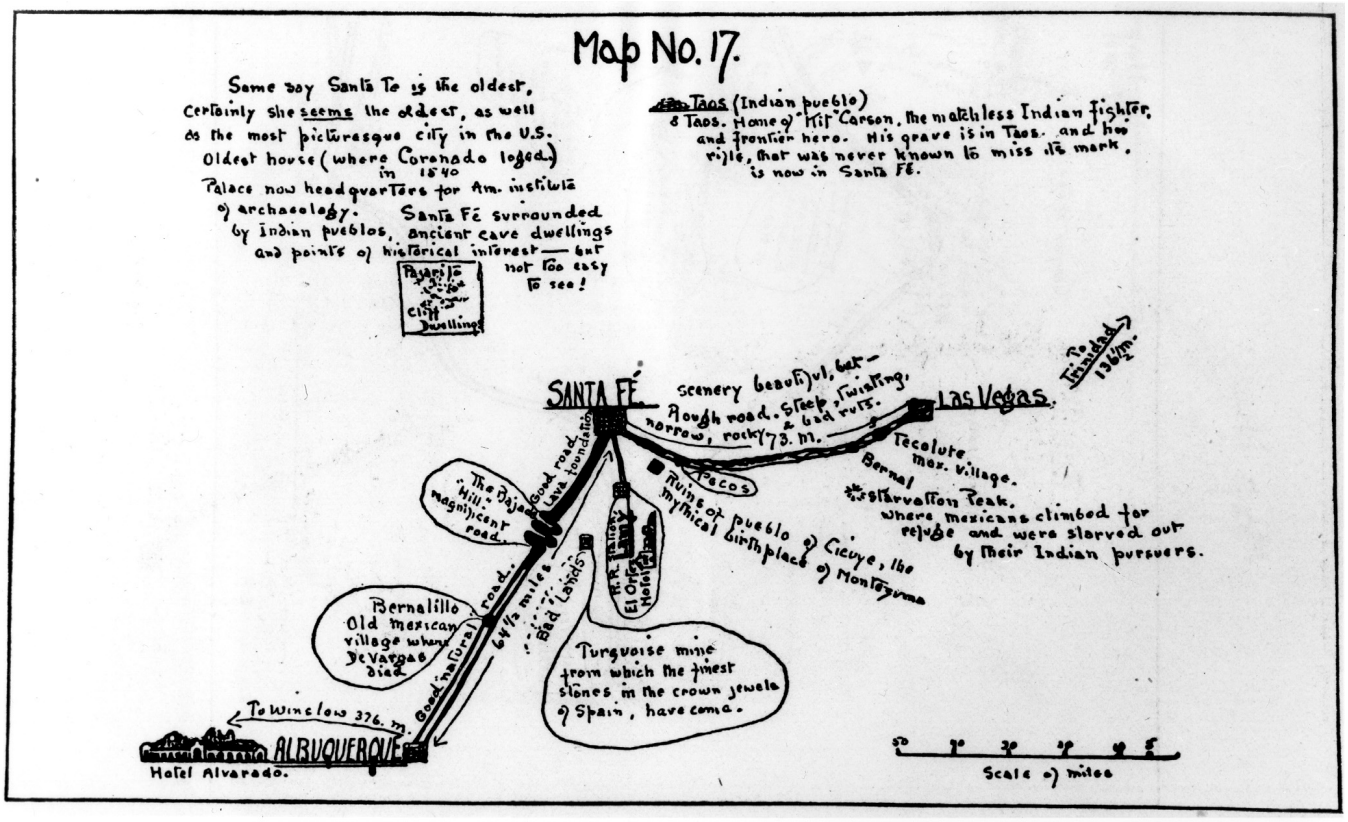

Figure 9. "Map No. 17" from Emily Post, By Motor to the Golden Gate, *(New York: D. Appleton, 1916). Courtesy of the Newberry Library.*

cartographic authority. It is little more than a plan for a route, and frankly confesses to its readers that:

> We are lacking in accurate information and data. If the tourist and local patron of the Trail knows of inaccuracies we will greatly appreciate exact information. Should there be any places where the marking should be more distinct, give us the spot. We would appreciate several logs, and ask those making the run to mark on a map the exact distances between towns as shown by the speedometer, and to forward such maps to us. A new one [apparently reflecting the suggested changes] will be returned in exchange. (Yellowstone Trail Association 1914)

As noted earlier, Post's difficulties might have been solved had she searched successfully for an Automobile Blue Book (see Figure 4). The Blue Books' extensive collection of route logs were compiled and published in steadily increasing number of volumes from 1901 to 1927, covering every region of the country only from 1911 (McKenzie 1963, 19). Though the sources for the route logs in the Blue Books were unidentified, the logs were the product of a peculiar breed of early motorist who, like Post, found that their pleasure drives gave them intelligence about road conditions for which there was a hungry public audience.

". . . the logs were the product of a peculiar breed of early motorist who, like Post, found that their pleasure drives gave them intelligence about road conditions for which there was a hungry public audience."

One such intrepid route logger was Thomas W. Wilby, who was hired by the U.S. Office of Public Roads temporarily in 1913 to make a grand circle tour of the United States with the goal of logging "Middle and Southwestern routes from the Atlantic to the Pacific which would make feasible transcontinental highways of the future." Wilby's account of the journey in a popular magazine explains how route logging was performed, evidently with the anticipation that readers would follow his advice:

> Equipped with an odometer and a set of a well understood signs, the "logger" sets his instrument at zero and draws a line upward from the bottom of his notebook to represent the direction in which his car travels from the starting point. Forks, crossroads, three and five corners, are added to the diagram as they occur, and the distances from one to the other are noted exactly. No landmark of any prominence which can assure the motorist that he is on the right road is omitted; indeed I knew of one enthusiastic "logger" on the plains who, in his zeal for literal accuracy, added to his 'log' the injunction: 'Turn Left by the Dead Steer,' and "Proceed to Bones on Hill." (Wilby 1912)

Others turned this passion into full-time employment, and were able to earn a living producing these logs in both verbal and cartographic format and publishing them on their own or, more often, through motor clubs. They styled themselves as "pathfinders" or "trailblazers" in clear reference to American trail guides of the eighteenth and nineteenth centuries, to whom they frequently compared themselves. This comparison was not as exaggerated as it might initially seem. As we noted at the outset, while virtually all of the roads the pathfinders traveled and logged physically existed as local paths and rights-of-way, these roads had to be imagined as parts of a single overland route. They had to be mapped in a form comprehensible and useful to tourists before they could in fact become practical highways for motorists at large. The activities of William "Bill" Rishel, of Salt Lake City, illustrates this point. In the 1890s he had gained local notoriety and knowledge of Utah highways as an overland bicyclist. He claimed to have driven the first automobile in Utah in 1900, and it was about that time that he started providing inquiring tourists what he

"was convinced was the first cross-country road map ever drawn" (Rishel 1983, 53). Rishel soon established a private touring agency that eventually affiliated with the American Automobile Association as the Utah State Automobile Association. In 1911 he began working full time exploring and logging excursion routes for publication in the *Salt Lake City Tribune* sports section from behind the wheel of a rugged "pathfinder" automobile provided by the newspaper. By 1920 Rishel's *Salt Lake Tribune Automobile Book* logged more than 20,000 miles of roads in Utah and the six states bordering it. Rishel's routes became the basis of several of the great transcontinental highway association routes passing through Utah (the Lincoln Highway, Pike's Peak Ocean to Ocean Highway, Victory Highway, Zion Park Highway, Evergreen Trail, and Pershing Historic Highway), and were later followed wholly or in part by U.S. Highways 6, 30S, 40, 50, 89, and 91, and 189 (Rishel 1920). On one of his pathfinding trips, blazing a new road into Yellowstone National Park from the West in 1911, he was forced to remove tree stumps from the bed of an existing wagon route, since his was the first car, with its low-slung chassis, to pass through (Rishel 1983, 65-69). This route became the park exit followed by today's U.S. 20.

"Pathfinders like Rishel and Westgard began their careers as hobbyists. Their accumulated knowledge and skill opened the way for their logs and maps to enter a more public route mapping process."

Another well-known route-logger was A.L. Westgard, who laid out a number of overland routes as an official "Pilot" for the AAA. Westgard gained his fame from his employment as the pathfinder for several of the annual Glidden tours, which from 1904 to 1913 were organized by the AAA and motoring enthusiast Charles A. Glidden to prove the reliability of automobiles for long-distance travel. Westgard was also instrumental in determining the routes of the Lincoln Highway and Midland Trail, and in 1915 was appointed Director of Transcontinental Highways by the National Highways Association, an organization that promoted the creation of a federally owned system of interstate highways. A map of the United States, now in the Library of Congress, showing the NHA's routes includes advertisements for Westgard Tires and sundry travel toilet articles bearing his name (National Highways Association 1919).

Pathfinders like Rishel and Westgard began their careers as hobbyists. Their accumulated knowledge and skill opened the way for their logs and maps to enter a more public route mapping process. Some of their contemporaries continued to map motoring *terra incognita* for the sheer pleasure of it. Around 1920, for example, an anonymous motorist and his family arrived at a ranger station on the North Rim of Grand Canyon National Park.

> The father alighted, went in, and began comparing the available maps of southwestern Utah with his field made ones. It developed that he was a professor of engineering in a midwestern university. . . . "There isn't a map of the section through which I came that correctly represents most of it," he remarked. "We wandered here and there and often were able to make no more than fifteen miles a day, but we have plotted the route over which we came, and every one of us is in finer physical condition because we really got back to Nature. Furthermore, we will give the world a better picture of motoring facilities in the region through which we came." (Showalter 1924, 24-25)

CONCLUSION

The evident pride with which this last anonymous cartographer recounted his family's own Western expedition reminds us of the pride Inga, our Minnesota motorists, and our Philadelphia tourists expressed in their own annotations of printed maps. All of the private mapping practices discussed here are clearly linked by the cartographic literacy (if not skill) and self-motivation of their practitioners. The apparent historical insig-

nificance of latter-day map inscribers relative to figures such as Rishel, Westgard, and Post was largely a matter of timing, social status, and entrepreneurial spirit. The logs and maps of early motoring pathfinders more easily fit into a general history of cartography than privately inscribed printed maps because they played a demonstrable role in the early public and institutional mapping of American motor routes. This role was reduced and then largely erased from American public memory after the 1920s, when the state and federal governments took over responsibility for highway designation and construction, assigning numbers to the pathfinders' highways. Meanwhile, larger cartographic firms, motor clubs, and oil companies produced the most widely distributed road maps. Yet road mapping performed on a small scale by private individuals and non-professional cartographers continued to play a public role after the 1920s.

A more general view of Inga's map (Figure 10) reveals that the printed component of the artifact itself straddles the boundary between public and private cartography. Though not hand-drawn, the map was rather inele-gantly prepared for a local realtor named Albert Borden by the Link Line Co. Borden's inscription—or rather, that of his firm—can be found at upper right. Around the margins of the map are a host of advertisements for other small, local businesses (including painting contractor Bayliss Suydam and registered pharmacist Anthony Gentile). Road and street maps like this, prepared and financed by local private interests, have become commonplace at local chambers of commerce and tourist information bureaus in virtually every community in the United States. Few of them will ever be regarded as landmarks of twentieth-century American cartography. Neither is it likely that a copy of this map has been preserved by a state archive or by the Library of Congress, circumstances that would give it some public legitimacy as a cartographic oeuvre. Yet Borden's map clearly had a public life. It helped to generate business for Mr. Borden and his supporting advertisers. And it was an authority on local geography suitable for distribution in public place and for use by potentially thousands of consumers who were total strangers to Mr. Borden, to the staff of the Link-Line Co, and to Inga. The public (and historical) significance of the Borden map thus rests on its role in the life of the community it represents. Inga's inscriptions and those of the map's advertisers represent different moments in the life of the map and motivations for its use, and both reveal how private lives engaged and constantly redefined the meaning of public cartographic images.

A traditional construction of the relationship between cartography and its consumers in this context might assert that the booming American business in road maps simply tapped into a huge demand for road and travel information. The engagement of commercial advertisers and of private motorists in the early public mapping of American highways, however, suggests that road mapping developed among motorists who were at once mapmakers and map consumers. In time, as the scale and influence of American car culture expanded and as automobile travel became commonplace for the great majority of Americans, road mapping came to be dominated in Americans' imaginations by larger institutional producers such as Rand McNally, the AAA, and the corporate clients they served. As the invention of personalized travel guides demonstrates, the emergence of road mapping as a national industry did not diminish its engagement with the private lives of travelers. Trends in the design of road map cover art from the 1920s also suggests that road mapping was engaged with its consumers in ways extending beyond traditional definitions of map functionality. During the 1920s and 1930s this art frequently depicted female drivers either in the company of men or alone, in con-

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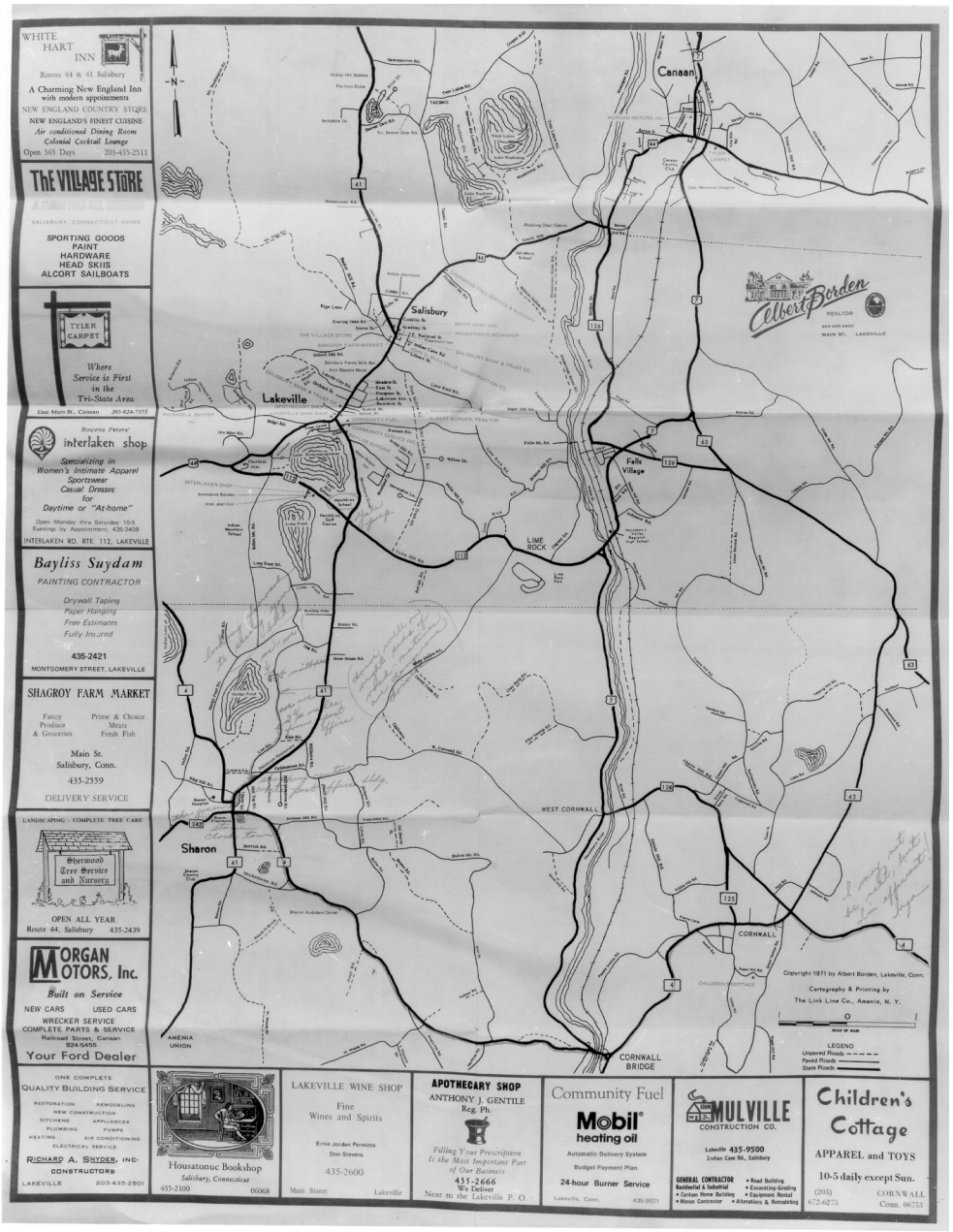

Figure 10. Albert Borden, New York, Connecticut, Massachusetts Tri-State Area Maps *(Amenia, NY: The Link Line Co. for Albert Borden, Lakeville, Conn., 1972), annotated anonymously.*

scious reference to freedom of movement the automobile had begun to offer many women (Scharff 1991). After the Second World War, the tone of cover art shifted to appeal to the leisure use of the automobile by the nuclear family, stereotypically appearing on maps as a family of four, with a boy and a girl, and perhaps a dog. Inside these covers, the cartographic depictions of the highway network were punctuated by points of interest, motel recommendations, and the location of gas stations. As we have seen, such annotations were similar to the private manuscript annotations of individual consumers—though they referred to potential behavior in the space described by the map rather than to actual trips.

Whether road mapping was organized on a small or large scale for institutional or personal purposes, the almost unlimited access twentieth-century Americans had to this cartography made it one of most socially

influential forms of mapping in history. Road maps were significant lenses through which Americans imagined and experienced their personal and national geographies. The evidence of but a few inscribed maps presented here suggests that Americans not only read their road maps intently and took them seriously, but viewed them only as intermediate representations useful to their own personal mapping of the American roadscape. A more comprehensive search for additional examples of inscribed and otherwise personalized maps as well as to references to road map use in the popular press and travel accounts will allow us to broaden our understanding of map use in this intensely map-conscious society.

"Where access to printing technology is relatively open and consumer demand for cartographic information is high, as it has been in the United States in this century, private mapping voices can influence public mapping and even social agendas."

The American road mapping experience demonstrates that the lines between map maker and map user and between printed and manuscript cartography are indeed blurry ones. We have seen how the meaning of printed cartography is not frozen by the act of printing, but is reworked and transformed into new meanings and maps by use. We have also seen how private map consumers can become public cartographers in the voids left by institutional mapping. Where access to printing technology is relatively open and consumer demand for cartographic information is high, as it has been in the United States in this century, private mapping voices can influence public mapping and even social agendas. One of the great claims for the current digital revolution is that it will increase individual access both to mapping technologies and to the means of exchanging geographical information with others, while challenging the primacy of modern print culture. If this turns out to be the trend in the twenty-first century, historians of cartography would do well to look for its precedent in the twentieth.

NOTES

1. An earlier version of this paper was originally presented in July 1999, in Athens, Greece, at the Seventeenth International Conference on the History of Cartography. I am indebted to Matthew Edney for early conversation about this paper, as well as to the three anonymous reviewers for their insightful and helpful criticisms.

2. Ironically, given the subject of the series, these lectures were never published as a unit. Related works that emerged from the series include Godlewska (1988) and Stone (1989).

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