THE PANGRAMMATIC HIGHWAY

UDO PERNISZ Midland, Michigan

Traveling by car, usually passive and often boring, can now be turned into a meaningful recreation. The activity described here started out with what the children called Bingo: looking for signs along the highway with the letters B-I-N-G-O on them, one letter per sign, and in the order prescribed by the word. Each player silently checks the signs visible from the car until the one who has first seen all five letters calls out "Bingo." The signs that can be used for this game must be visible from the road, more or less facing oncoming traffic. This includes traffic signs along the road and signs off the road, that is, commercial signs, advertising, graffiti on barn walls, or names on factory buildings. Text written on vehicles is not admissible: no license plates, no car types, no lettering on trucks or utilities.

It took more than a year of occasional playing this game, on several trips from the middle of Michigan down to Detroit and back, before I realized that the rule by which only road signs and immobile text are used for compiling the word, in fact characterizes the highway as to its capability to provide certain letters in a certain sequence over a distance traveled.

Heading north the other day from Detroit on I-75, the whole family played the word BINGO several times as usual. Then we used our names for a change. We had just passed the JOSELYN ROAD exit (using the J to start my daughter Janka's name) when my other daughter, Pam, suggested that instead of collecting a word, one should go through the whole alphabet, from A to Z. This formidable task was considered a family affair, rather than individual competition, and we decided that each letter should be called out by whoever saw it first. We are five, and the excitement over the new game was great.

We found A, B, ..., I without much trouble in short time, and then got stuck at J. We realized that this letter is really scarce on road signs: after the exit to Joselyn Road we drove for nearly twenty miles without encountering a J until we finally passed a sign which announced a fair sometime in JUNE. The reprieve was short-lived: no sign with K, either -- another rarity. It showed up eventually in the name MCKEARNS on a billboard. The next difficulty was to find the letter Q. It was spotted on a sign that announced an activity going on in a SQUARE in a nearby town. The end of the alphabet was surprisingly easy: the X occurs at highway EX1Ts, and V, Y, and Z are on signs erected on the median of interstate highways at fairly regular intervals stating that AUTHORIZED VEHICLES ONLY may turn there. This first stretch was the longest on our journey: 23 miles from A to Z. In contrast, it took only 7 miles to collect the next alphabet.

Obviously, the network of highways can be characterized and catalogued by the distances over which the passengers in automobiles can find all the letters of the alphabet from A to Z on road signs while driving along. Such a distance may be called a Pangrammatic Distance. Its length depends on many variables, most importantly on the geographical location, the type of highway or road (interstate, state, county), the starting point of a journey and the direction of travel, the weather and lighting conditions (i.e., the time of day), and on human factors and skills (eyesight, ability to read).

There are two different kinds of signs that contribute to the pangrammatic distances of a road:

- Highway-specific signs carrying words that pertain to automobile traffic. These signs reflect the extent technology is present in administrative regulations. BRIDGES ICE BE-FORE ROADS or RAILROAD CROSSING are examples in this category.
- (2) Area-specific signs with words that derive from the cultural and economic background of the immediate or general region through which a particular highway leads. Proper names and advertisements belong here as well as call letters of radio and TV stations (supplying W and K on the East and West Coast regions, respectively).

Both kinds of signs together determine the range of pangrammatic distances of a region. Here are two non-exhaustive lists of essential words, i.e., those containing the less-common letters, found on highway signs along I-75 north of Detroit.

List l: Highway-specific Words			List 2: Area-specific Words	
M P	MlLE (on mile markers) PARK	Ј К	JOSELYN ROAD KNIGHT'S INN	
W	WEIGH STATION		EQUIPMENT	
Х	EXIT	U	BUICK	
V	AUTHORIZED	V	CHEVROLET	
Y	VEHICLES	W	WSGN, WJZZ, WJRF	
Ζ	ONLY	Y	CHRYSLER	

There are several types of pangrammatic distances, depending on the rules one chooses to collect all the letters from A to Z. We excluded the opportunistic rule, namely collecting letters out of sequence, since this requires either good memory or some form of bookkeeping with pencil and paper, and also because this seemed too easy a task. Therefore, by definition, pangrammatic distances on highways are measured by collecting the letters of the alphabet in alphabetic order. (In case you are planning on traveling abroad, you'd use the alphabet of the particular language, e.g. Greek, Bulgarian, Arabic or Hebrew, in which the signs are written. This requirement is readily extended to languages that utilize syllabaries like Japanese.)

If several signs are in sight simultaneously, the challenge becomes picking the letters so one gets ahead farthest in the alphabet. With all the head-turning necessary to select individual letters from signs going past at 55 to 65 mph, it is advisable for the driver not to participate too keenly in this game; "trying to find an R on the sign over there" doesn't sound like a convincing explanation for driving off the road, and into the pastures or noise barriers that line a highway.

We tried several other ways of playing the game. For example, the rule of "One Sign, One Letter" may be relaxed: as the signs swish by, as many letters as satisfy the sequential requirement are taken from any one. In this way, the next pangrammatic distance could be covered in only three miles. While the former rule can be called monadic, giving a Monadic Pangrammatic Distance, the latter one is termed polyadic.

Another modification proved adequate for this game, namely taking two letters from each sign at a time: that is, A and B from the first sign, C and D from the next one, and so on. Several of these Dyadic Pangrammatic Distances were determined and found to be typically 5 to 8 miles long (for that section of 1-75). It is fortunate that the alphabet has an even number of letters so that picking pairs of letters leads to a well-defined end of the game. It is also fortunate that we decided not to pursue the other possibility, suggested by the factorization of 26, of finding two signs with the first one showing the letters A-M, and the second one, N-Z, since we didn't want to drive too far beyond our destination. Of course, the wise traveler might have a number of signs in the trunk that could be hung up in a desperate situation in order to keep a game going, or to finish it coincidentally with turning into one's street.

The challenge of future car trips will now be to label the roads one travels with pangrammatic distances, preferably of the monadic kind. A cartographic supplement for each major geographic area needs to be published and maintained, with reports about the effect the erection of new signs has on pangrammatic distances. A new discipline that studies the sections of the highway system that are invariant under the operation or removal of certain road signs will no doubt flourish soon. Finally, to be taken seriously as a logological activity, and as a game, the determination of pangrammatic distances needs definitive rules about admissible signs, number of passengers, technical aids, and reporting of results. It is clear that there is endless travel and work for logologists in relabeling and cataloguing the highways and roads of the country (the whole globe?) in lengths of pangrammatic distances. The meaning of Word Ways might take on a whole new dimension, too.