

## CHAPTER 19

I distrust a case that rests entirely on circumstantial evidence. A learned judge has told us that circumstantial evidence, if there is enough of it, is not only as good as but better than direct evidence, because direct evidence may be false. I do not agree with him. In the first place, direct evidence which may possibly be false is not evidence at all. But the evil of circumstantial evidence is that it may yield false inferences, as it has often done, and then the whole scheme is illusory. My feeling is that circumstantial evidence requires at least one point of direct evidence to establish a real connection of its parts with the question that is to be proved.

. . .R. AUSTIN FREEMAN  
Pontifex, Son and Thorndyke

## I

This chapter is, in the auctioneer's parlance, a rather Miscellaneous Lot, composed of snippets and snaps of this and that, snippets and snaps that go a long way toward tying the whole project up in a bright shiny ribbon. The first thing to be attacked in this chapter is the bus seating analysis, to which some of the foregoing analyses are closely tied. Then we shall ever so briefly turn our attention to a contemplation of the post-trip maps and skim our eyes over the whole panorama of maps, from the first home town map to the most recent arrivals from the kids.

## II

The total mass of bus seating charts is too complex for analysis here. The main reason for this is the fact that at least four types of vehicles were used on the trip. The English and French tour buses had radically different arrangements of seats, and were larger than the continental—or Dutch—tour bus. There are forty-five of these Dutch charts and they are all comparable along any dimension. These will be the basis for our analysis.

Upon arrival home in the States I composed a master bus seating chart on which I compiled all the Dutch bus seating charts. This chart showed for each single bus seating session the occupant of each seat. This chart was then transformed into a chart showing the sequence of seats occupied by each kid. Using the first of these charts—the Seat Chart—I was able to watch a particular seat on the bus and watch the changes in habitation. Using the second of these charts—the Kid Chart—I was able to watch a given kid move around on the bus. On both charts there are a series of blanks, on the Seat Chart showing empty seats, on the Kid Chart showing the absence of a kid from the bus at any time.

Due to the importance of location on the bus (whether back, middle, or front of bus) I was rather anxious to create a typical bus seating chart. There were at the outside (including Bob and me) only thirty-nine passengers while at the same time there were forty-five seats. To create the typical bus, I would have to identify those empty seats. From the Seat Chart it was a simple matter to count the blanks for each seat and rank all the seats on the bus in order of frequency of emptiness. This ranking was then graphed, and three classes emerged. Figure 19.0 shows the location of these three classes of empty seats. Much to my amazement, the resultant map seemed to my memory a decent presentation of affairs. The seats most frequently occupied were the window seats. This should not be surprising. The seats least

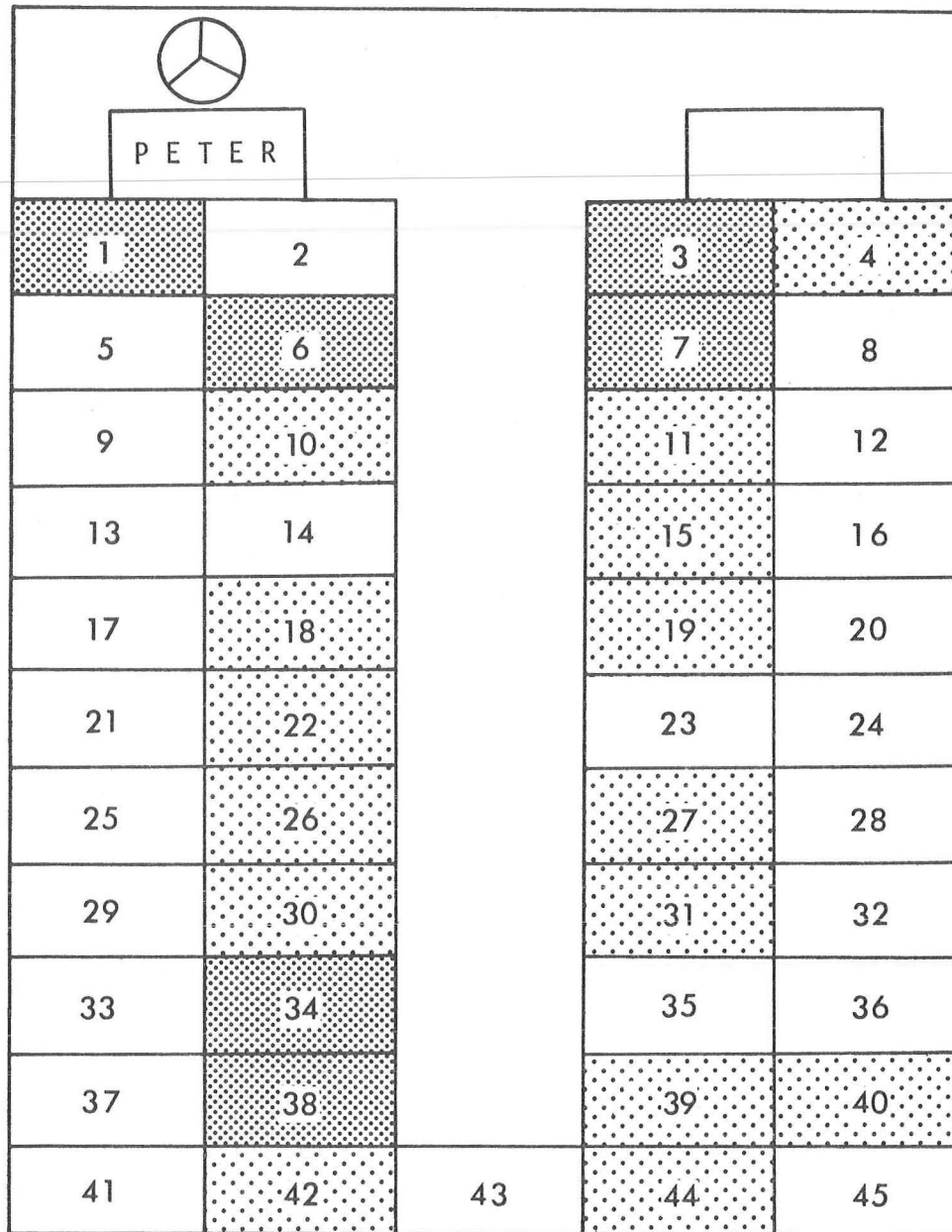





Figure 19.0 Occupancy of seats during 45 trips.

 Empty 16 to 29 times.

 Empty 8 to 15 times.

 Empty 1 to 7 times.

occupied—the requisite six seats—were found both in the front and back of the bus. The middle class of occupied seats turned out to be aisle seats.

The next step seemed more difficult. How was I to fill the thirty-nine seats with kids? What I did was simply add up the seat numbers of the seats each kid sat in and divide by the number of sittings (the seat numbers are shown on Figure 19.0). For example, Karl Prinz sat in seat 45, and then in seat 45 and still again in seat 45 and so on. I added up these numbers and found the average to be, lo and behold, 40.05. Table 19.0 lists the kids by average seat number.

TABLE 19.0

## KIDS RANKED BY AVERAGE SEAT NUMBER

Portman	2.09	Beck	24.40
Lenz	4.79	Giaconda	25.33
Bloch	7.85	Pagan	26.47
Lincoln	10.34	Jaeckel	27.00
Garrison	10.93	Gray	27.05
B. Brown	11.62	Watson	27.44
Gordon	12.96	Monroe	27.98
Baker	13.20	Heller	28.31
Mayo	13.58	Montaigne	28.68
Noyes	13.62	Jencks	29.59
G. Aiken	15.63	Palazzo	29.61
Hendricks	15.80	Pierce	30.21
Jones	15.82	Nash	31.69
F. Aiken	16.36	Abrams	32.40
Seward	18.18	Fisher	35.27
Eber	18.38	Johnson	35.60
J. Brown	21.92	Cruz	38.20
Needham	22.07	Casyk	38.71
Wood	23.00	Cummings	39.80
		Prinz	40.05

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It was then a simple matter to arrange the kids on the bus in this order, avoiding the six least frequently occupied seats. The bus that results is shown in Figure 19.1. It would seem that it might be possible to "idealize" this chart, that is, to make it better reflect the geographic realities of the bus behavior. For instance, George and Flora Aiken were "always" together and Flora "always" sat beside the window. In fact,



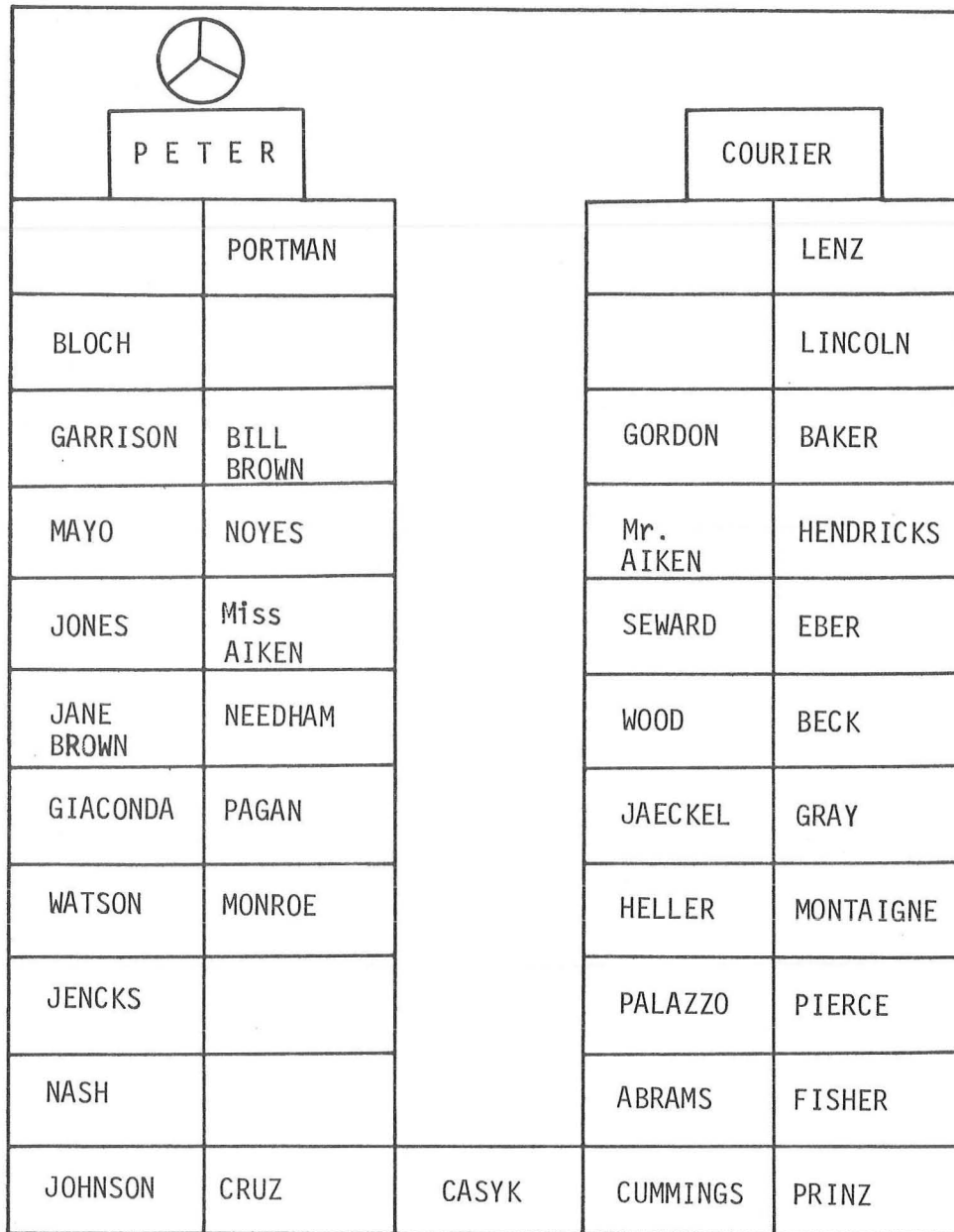


Figure 19.1. The typical bus.

the Aikens did sit next to each other 40 times of the 44 times possible, and Flora Aiken sat next to the window on each of these occasions. But in Figure 19.1 George and Flora are separated by two kids, and Flora sits on the aisle. This is because Figure 19.1 does not show people sitting on the geographic bus, but rather on an average or typical bus. This bus, since it is an average of seating behavior, does not have windows, loudspeakers, aisles, axles, and so on, and it would be a mistake to look for them here. While the typical bus may not show Flora Aiken next to the window, it does indicate that on the four occasions when Flora was not sitting with her brother, she was sitting behind him. Thus we make a trade: social information for geographic information. Who was sitting in the same part of the bus generally speaking? Where was so-and-so sitting vis-a-vis him-and-her? Figure 19.1, on the other hand, will not tell us where so-and-so was sitting vis-a-vis a particular air-vent or the wheels. Such information would be interesting, and easy to obtain, but irrelevant for our purposes. The purest expression of this typical bus is, of course, the ranking of Table 19.0. We display it on the geographic bus for purposes of clarity and information, and, as will be seen, because it also happens to be, in some sense, the geographic bus anyhow.

Table 19.0 and Figure 19.1 are revealing, particularly in regard to the strange states of affairs of the front and back of the bus, for if the average seat numbers may be taken as representing actual seats, there is a smooth and continuous progression from seats 10 to 32. But it is only before seat 10 and after seat 32 that we find our empty seats. Let us look at the front first. Porter Portman has the amazing average seat number of 2.09! To have achieved such an average means that Porter Portman had to have spent most of his time in the front row. In fact, Porter sat only in seats 1 and 2 with a single instance of having sat elsewhere—in seat 14. Likewise, Omar Lenz had the low average seat number of 4.79; but he sat exclusively in seats 1 through 10 (albeit with considerable jumping around). Only nine other people altogether ever sat in the first row, and these sat there with remarkable infrequency. The first row of seats was, in fact, the fiefdom of Portman and Lenz, and particularly of Portman. Lenz was an unreconstructed camera buff and it was from the front of the bus that pictures could be most effectively taken. But Portman was not a camera buff and he sat in the front of the bus for other reasons. It is impossible to say with the evidence before us whether Portman sat in the front of the bus because it was empty, or whether the front of the bus was empty because Portman sat there. It is, however, positively deposed that most of the kids refused to sit there because Porter Portman sat there. It must never be forgotten that this is the kid who introduced himself with, "I'm a redneck from Mississippi and I'd have voted for Wallace in the last election if I

could." Clearly, Portman was not going out of his way to get to know others nor to encourage others to get to know him. In fact he went out of his way to put others off, making them keep their distance, and on the bus managed to surround himself with a buffer zone of empty seats.

Now let us turn our attention to the back of the bus. These empty seats provide another buffer zone, between the messy, noisy, tour-ignoring back of the bus and everything in front of it. Recall our descriptions in Part II of the back of the bus. There was the eating of food, the doing of hair, the ignoring of the courier, the irreverent conversation, the sleeping, the littering of the premises with candy bar wrappers, empty pop bottles, pistaccio nut shells and cigarette butts. This part of the bus demanded separation from the rest, if only to protect the people farther up from contamination, from being drawn into the tantalizing, if messy, affairs of the back of the bus. But once again two forces are in operation: isolation of the back from the front, and protection of the front from the back. (It is hard to forget in this context that Nybia, noting Janine's presence on one occasion in the back of the bus, felt constrained to explain that Janine was feeling rebellious.)

Before attempting to define the boundaries of the three bus regions, let us look at some other information. Our initial organization of the group into mixers, fixers and rangers hypothesized that mobility on the bus would correlate with mobility in the cities. We can't test this because we know nothing about mobility in the cities of a systematic sort, but the basic argument can be recast. If a kid were interested in broadening his horizons geographically, vis-a-vis the space and cultures of Europe, he would also avail himself of the opportunity to broaden other aspects of his being at the same time. Thus someone interested in learning about Europe, would also be interested in learning about his fellows in Group L. The greatest amount of continuous time spent with Group L was on the bus. If a kid were exploratorily motivated, he would explore Group L on the bus. That is, he would sit next to as many people as possible. The most highly motivated kids would sit next to the greatest numbers of kids. These would be rangers, explorers. The least motivated kids would sit next to the smallest number of kids. These would be fixers. The mixers would fall in between. Thus we need a measure of social activity for the bus.

This was not difficult. For the most part the bus seats occur in pairs. All I had to do was see who were sitting in what pairs. This of course assumed that people sitting in pairs would communicate, and that people chose the seats they did for a reason. (As we shall see, certain pairs of kids did not communicate.) I simply ran down the Seat Chart two columns at a time, isolating such pairs as 1 and 2, 3 and 4,

5 and 6, and so on. The last row was different in that the seats were not set off as pairs but run continuously together. Thus three of these seats (42, 43, 44) enable their occupants to sit next to two kids at the same time. In this case the tallied pairs were 41 and 42, 42 and 43, 43 and 44, and 44 and 45. Obviously this means that kids in the back of the bus have an edge on social activity, but our measure only reflects the geographic reality of the seating arrangement. Kids sitting there simply had greater opportunity for social contact. I cannot imagine that they weren't aware of this, or that the incessant experience, common to all of us, of the guitar materializing in the back of the bus, the comradely singing, and so on, wasn't borne in mind. It might be noticed at this point that as contact was increased by the arrangement of seats in the back, privacy was diminished. Conversations are at least three-way back there, and more often four-and five-way. This is not the place for that intimate tete-a-tete. In Table 19.1 we have ranked the kids according to the number of different kids they sat next to. When two kids have sat next to a similar number of kids, they have then been additionally ranked by their average seat number, a higher average seat number moving them higher in the ranking. (This is because, as we have just indicated, socialization potentials increase as you move back in the bus, away from the courier, the empty seats, Porter Portman in the front, to the social last row.)

TABLE 19.1

KIDS AND OTHERS RANKED BY NUMBER OF OTHERS SAT NEXT TO,  
AND THEN BY AVERAGE SEAT NUMBER

Kids		Seat	Kids		Seat
Abrams	18	32.40	Gordon	10	12.96
Heller	17	28.31	(Lenz)	10	4.79
Casyk	14	38.71	(Needham)	9	22.07
Johnson	14	35.60	Fisher	8	35.27
Montaigne	14	28.68	Pierce	8	30.21
Watson	14	27.44	Eber	8	18.38
Jencks	13	29.59	Noyes	7	13.62
Palazzo	12	29.61	Garrison	7	10.93
(Jackel)	12	27.00	(Bloch)	7	7.85
Pagan	12	26.47	Prinz	6	40.05
Jones	12	15.82	Cruz	6	38.20
Hendricks	12	15.80	(Wood)	6	23.00
B. Brown	12	11.62	J. Brown	5	21.92
Giaconda	11	25.33	Seward	5	18.18
(Beck)	11	24.40	(G. Aiken)	5	15.63

Lincoln	11	10.34	Baker	5	13.20
Cummings	10	39.80	Mayo	4	13.58
Nash	10	31.69	(F. Aiken)	2	16.36
Monroe	10	27.98	Portman	2	2.09
Gray	10	27.05			

At a glance, it can be seen that there was a tendency for the more social kids to sit farther back on the bus than the less social kids, even discounting our second ranking measure. Thus the most active kid, David Abrams, sits in the second row from the back; the next, Heller, sits four rows from the back; the next, Casyk, in the back row; the next, Johnson, in the back row; the next four within the last four rows. On the other hand, Portman sits in the first row, and the next least active five sit in the first six rows. What can be said most generally is that active kids tend to set behind inactive kids.

This ranking has been divided into septiles and these septiles have been aggregated, two septiles comprising the most active group, three septiles the median group, and two septiles the least active group. Thus we have three groups, containing nine, thirteen and nine kids each. These groups are tentatively labeled rangers, mixers and fixers. Where are these groups sitting? Figure 19.2 shows the location of these groups according to the average seats plotted in Figure 19.1. This chart reveals two basic bus regions. In the region including the first six rows of the bus, we find the preponderance of the unsocial kids as well as six-sevenths of the adults. In the other, including the other five rows, we find all of the most social kids and only a single adult. Several things are clear: social and unsocial kids do not mix; unsocial kids sit with the adults; unsocial kids and adults sit up front; social kids do not sit with adults; social kids sit in the back. Moving through these two regions are the middle group, half of them (6/13ths) sitting in front, and half (7/13ths) in the back.

TABLE 19.2

## SEATING CHARACTERISTICS OF THE THREE GROUPS

	n	Average Average Seat	Average Seat Range
Group 1	9	30.76	26.47 - 38.71
Group 2	13	23.25	10.34 - 39.80
Group 3	9	19.09	2.09 - 40.05

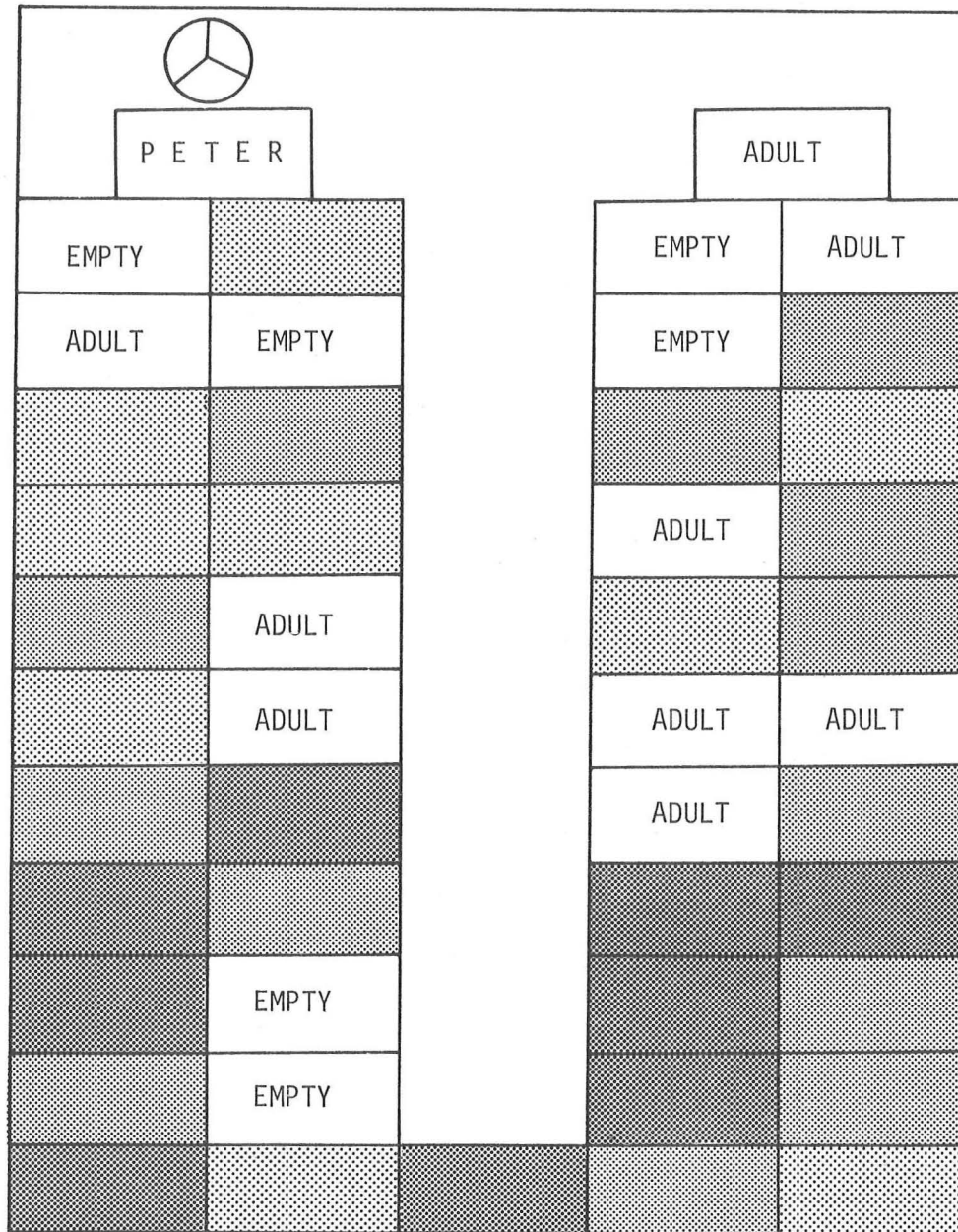





Figure 19.2. The social bus.

-  The most social two septiles.
-  The medianly social three septiles.
-  The least social two septiles.



Confirming the obvious is Table 19.2. Clearly the social group sits farthest back, the unsocial group farthest forward. The range of seats is the narrowest for the social group, and widest for the unsocial group. Certainly, it cannot be questioned that social mobility is related to seat location. Can these locations, however, be rationalized?

Let us assume that the social group is composed of rangers. These kids have supposedly high motivation to explore, to widen horizons, to exploit environments for all they're worth. Our assumption was that such kids would be eager to exploit not only the environment of Europe, but the social environment of the tour. Is this supported by the foregoing analysis? By all means. The kids were given one preeminent opportunity for social exploration: the long bus trips between cities and "sights." At the same time, these long bus trips presented the least direct opportunity for "seeing" Europe. That is, Europe through the windows of a rapidly moving bus is the least immediate modus for the perception of the European gestalt. The exploiting, exploring ranger weighs the two opportunities—high on social environment, low on European environment—and comes to a decision. He will exploit the social environment while on the bus. But the best place to "see" Europe from the bus is in front where there are more windows, while the best place to talk is away from the T-C's and the courier. The group that opts for social exploration will want to talk, and will not care about seeing Europe from the bus. Thus the exploring group will sit in the back. The group we find sitting in the back is the most socially active group. I think that we can take it that these are the rangers, and that these kids have decided to forego Europe from the bus for the opportunity of seeing America in the flesh.

The very opposite case must be made for the fixers. These kids have very low exploratory motivation and little desire for contact, either socially or otherwise, because their beings are "fixed" on home, for example, or some other known center. Unwilling to take the chance of becoming involved with Europe, with the strange, the unknown, unwilling to risk, these fixers recognize that "seeing" Europe from the bus is the most buffered, least painful approach. They will want—to the extent that they want to see Europe at all—to see it from the bus, and the best place from which to see Europe on the bus is the front where there are more windows and where the all-knowing courier and other adults reside. On the other hand, as they are unwilling—or unable—to engage Europe, they are equally uneager to engage America as represented by the kids on the trip. In other words, they will want to put themselves in such a position as to not have to talk, or otherwise socially engage, with other kids on the bus. But because the T-C's, courier and so on inhibit talk in the front of the bus, there is least risk

of talk in the front of the bus. Thus the unsocial group will sit in the front. The group we find sitting in the front is the least socially active group. I think that we can take it that these kids are the fixers, and that these kids have decided to forgo the social realities of the tour on the bus for sensing Europe through the windows at sixty miles an hour. (Obviously, Erica Cruz and Karl Prinz would seem to constitute an exception to these conclusions. They will be dealt with below in detail.)

For the mixers we make neither the ranger nor the fixer case. The mixers have in them the exploratory drive of the ranger, tempered by the fears of involvement of the fixers. Consequently, it would be suggested that, to the extent that they were more like fixers, they would sit farther up, whereas to the extent that they were more like rangers, they would sit farther back. However, it follows from the definition of the mixer type that the most commonly employed strategy to achieve a sufficiency of exploration without engaging in excessive risk will be to form small groups, which groups will help absorb environmental shock as a group at the same time that they inhibit the formation of all-absorbing pairs. Mixers are the group that tends most to preserve the larger characteristics of Group L as a whole. However, the bus does not provide locations for the formation of small groups with the exception of the last row. Consequently, mixers will be forced to sit as pairs, pairs which provide the nuclei for small off-bus groups. Thus we should expect to find the mixers exhibiting greater pair behavior and less individualistic behavior than any other group. In this case a pair is defined as two individuals sitting together more than five times during the trip. If one person sits with a second person ten times, a third person eight times and a fourth person five times, we call the first pair a primary pair, the second pair a secondary pair, the third pair a tertiary pair, and so on. It further follows from the definition of our types that if fixers exhibit pair behavior, the pairs that form will be least threatening and demanding, least deep and intense, least characterized by mutual exploration and risk-taking, and longest lasting, since there is little reason to split (low interaction tension) and great reason to stay together (isolation from the rest of the group). Then, if rangers form pairs they will be highly threatening and demanding, deep and intense, characterized by vital mutual exploration and risk-taking, and shortest lasting, since there is great reason to split (high interaction tension) and little reason to stay together (social exploratory drive). Finally, the mixers will engage in relationships somewhere in between, toward fixer type if the mixer is low on the social interaction scale, toward ranger type if the mixer is high on the social interaction scale. For our group of adolescents, sexual relationships will be more tension-loaded than non-sexual relationships, and thus we should expect that more socially active kids will engage in sexual relationships more



readily than less socially active kids. Furthermore, we should expect that pairs will more readily be formed from the following classes than not: rangers with mixers, mixers with mixers, mixers with fixers and fixers with fixers (thus excluding the likelihood of rangers pairing with rangers, and rangers pairing with fixers). We can summarize the foregoing:

- 1) There will be more pairings of all sorts involving mixers.
- 2) Pairs will stay together longest among fixers, least long among rangers.
- 3) Sexual pairing will involve most rangers, fewest fixers.
- 4) Pairs will be least likely to form between ranger and fixer, then between ranger and ranger.

Of the foregoing suggestions, we have the ability to test three. The item about sexual pairing autocorrelates with the fact that four of the eight boys on the tour are rangers. Thus, sexual pairing in Group L is forced to involve rangers predominantly. The sexual suggestion cannot be tested in any general sense using data from Group L for this reason, and will be ignored. We will take the rest in order.

TABLE 19.3

KIDS INVOLVED IN PAIRS BY GROUPS: TOTALS AND AVERAGES

	Total	Pairs per Kid
Rangers	12	1.33
Mixers	26	2.00
Fixers	10	1.11

As can be seen from Table 19.3, mixers were involved in more pairs than either other group, both absolutely and on a pairs-per-

kid basis. The figures show that, for instance, rangers were involved in only twelve pairs altogether, and that each ranger was involved in 1.33 pairs. These pairs may have been rangers with rangers, rangers with mixers or rangers with fixers. Table 19.3 does not discriminate. The low numbers of pairs formed by the rangers and fixers is explained by the longevity of the pairs formed. Thus the rangers, busy ranging, were unwilling to invest much time in any individual, while the fixers, "fixed" on one individual, invested all their time in single primary pairs. Tables 19.4 and 19.5 make this clear. Table 19.4 lists all the pairs in which kids sat together more than twelve times and shows the number of times these long-lasting pairs stayed together.

TABLE 19.4

## LONG LASTING PAIRS

Group	Pair	Times Together
Fixer	Baker-Mayo	34
	J. Brown-Seward	31
	Cruz-Prinz	29
	Noyes-	
Mixer	Lincoln	26
	Fisher-Pierce	21
	Eber-Garrison	20
	Gray-Nash	20
	Giaconda-Monroe	17
	Eber-	
Ranger	Pagan	17

As can be seen, among these long-lasting pairs, the fixers are the longest lasting. Also note, that although the foregoing list includes all the pairs together more than twelve times, there are no pairs sitting together thirteen to sixteen times. That is, there is a real break between the number of times long lasting pairs stay together and the number of times the balance of the pairs stay together. Furthermore, 78% of the fixers are on Table 19.4, 69% of the mixers, but only 11% of the rangers. Clearly, the fixers are clinging to one another, while the rangers are clinging to no one. This point is driven home by Table 19.5

which shows the average number of times group members remain in pairs.

TABLE 19.5

## LONGEVITY OF PAIRS BY GROUPS

Group	Average "Life" of Pairs
Rangers	7.92
Mixers	11.63
Fixers	24.90

This simply states that a pair involving a ranger is likely to last one third the time of a pair involving a fixer, a pair involving a mixer about one half the time of a pair involving a fixer and so on. In other words, fixer pairs are long lasting, ranger pairs of shortest duration. To a substantial extent this results from the fact that fixers pair with fixers, but mixers with rangers as shown on Table 19.6.

TABLE 19.6

INTRA- AND INTERGROUP PAIR BEHAVIOR  
(Numbers represent pairs)

	Rangers	Mixers	Fixers
Rangers	2		
Mixers	20	14	
Fixers		4	8

As can be seen, no pairs were formed between fixers and rangers. This reflects the desire of fixers to form long-lasting isolating pairs, a desire in direct conflict with the wish on the part of rangers to get to know as many people as possible. At the same time, rangers formed few pairs among themselves. This also reflects the wish of rangers to get to know as many different people as possible, since, when

one ranger may be interested in pursuing a relationship with another ranger, that ranger may be ready to move on. The most fertile mating situation is between rangers and mixers, where the exploratory drive of the ranger is matched by the exploratory drive of the mixer tempered by the mixers more "social" tendencies, and then among mixers themselves. In point of fact, mixers establish more primary pairs among themselves than between themselves and rangers, as is shown in Table 19.7.

TABLE 19.7

PRIMARY INTRA- AND INTERGROUP PAIR BEHAVIOR  
(Numbers represent pairs)

	Rangers	Mixers	Fixers
Rangers	1		
Mixers	7	10	
Fixers		4	7

Since the primary-secondary distinction is a function of longevity of pairs, Table 19.7 simply shows that, while rangers do pair with mixers more frequently than any other combination, they establish predominantly secondary pair relationships with these mixers. In terms of primary pairs, it can be seen that ranger-mixer fertility is no greater than fixer-fixer fertility. (We would naturally anticipate that fixer pairs would be mainly primary from Table 19.5.)

We may summarize the foregoing as follows. Mixers are involved in more pairs than any other group. The "life" of mixer pairs is midway between that of rangers and fixers. Primary pairs form most readily among fixers, but mixers form more primary pairs. Considering all types of pairs, the most fertile combinations are rangers with mixers, then mixers with mixers, then fixers with fixers; while the least fertile combinations are fixers with rangers, rangers with rangers and fixers with mixers. Thus we may return to our contention that mixers will exhibit greater pairing tendencies than any other group. They do so. We may now refer once again to Figure 19.2 and explain why, whereas rangers sit in the back and fixers sit up front, mixers sit anywhere, half up front and half in back. They sit anywhere because the pairs they form on the bus are less important on the bus than off. This is because the pairs they form are really important as the nuclei of small off-bus

groups. Such a group might free-time tour together, sit at the same table while eating, pajama-party together, and wait together (to get on the bus in the morning, for room assignments, and what have you). On the bus such a group must split into pairs. If these pairs are interested in talking or sleeping, they will gravitate to the back. If they are more interested in reading, or looking, they will gravitate to the front. Unlike the fixers who maximize through-the-window touring on the bus, unlike the rangers who maximize social interaction on the bus, the mixers are more precisely marking time on the bus, waiting to reassemble into small groups. As mixer groups fluctuate in composition, so do mixer pairs, and it is just this fluctuation in group composition that drives the number of mixer pairs beyond the number of other group pairs. Likewise it is the importance of the mixer group that reduces the importance of the mixer pairs. Finally, it is the reduced significance of mixer pairs that allows them to sit anywhere on the bus.

We may now answer the question that prompted the foregoing investigation: what are the boundaries of the bus regions? According to our analysis there are two major bus regions, the front and the back, shown on Figure 19.2. The front is characterized as the abode of the adults and fixers, the back as the abode of the rangers. Against this view is all of Part II, where the bus was regularly trichotomized into the front, middle and back. Is it possible to reconcile these two points of view? To answer this it will be necessary to nominate criteria capable of discriminating the middle of the bus from the front or back. The most obvious of these is that the middle be dominated neither by rangers nor fixers, but rather by mixers. Less obvious is that, since the front and back are relatively homogeneous in composition, the middle be heterogeneous in composition. Finally, but critically the middle must be in the middle.

Recalling the distinctions made earlier between the social and geographic bus will help us designate the middle of the bus, for, since rows are not meaningful entities on the social bus, there is no need to respect them in dividing the social bus into its parts. If we consider the social bus as nothing more than a ranking, it becomes meaningful to consider such a portion of the bus as fifteen seats, which is a third of all available bus seats, even though such a number of seats results in awkward divisions of the geographic bus. We shall do this, designating the first fifteen seats as the front of the bus, the next fifteen as the middle and the last the back. (The relevant ranking is in Table 19.0.)

TABLE 19.8

## LOCATION OF RANGERS, MIXERS AND FIXERS

Location	Rangers	Mixers	Fixers
<b>Front</b>			
11 people	0	3	5
8 kids			
<b>Middle</b>			
15 people	2	6	2
10 kids			
<b>Back</b>			
13 people	7	4	2
13 kids			

The numbers refer exclusively to the kids. Although this analysis suffers from compartmentalizing a small sample too many ways, it is still clear that 1) The front is dominated by fixers and most of the fixers are up front; 2) The middle is dominated by mixers and most of the mixers are in the middle; 3) The back is dominated by rangers and most of the rangers are in the back. Thus our first criterion for the middle of the bus is met: that it be dominated by mixers. Bounding the middle in this manner also allows us to retain the essential characteristics of the front (that it be dominated by fixers) and the back (that it be dominated by rangers). Our second criterion, that of heterogeneity, is also met. No region failing to include rangers, mixers, fixers, and adults can be considered heterogeneous. But the front of the bus includes no rangers, while the back of the bus includes no adults. Only the middle of the bus includes members of all four groups, and thus only the middle is heterogeneous. Finally our last criterion is met: the middle of the bus is most clearly in the the middle.

This middle of the bus is similar to tidelands, which are neither ocean nor land, but a totally distinct entity resulting from the confluence of the two. The middle of the bus mediates between front and back and can set the tone for the entire bus, since behavior acceptable to the middle is acceptable to representatives of the four bus groups. At the same time it acts as a barrier between the authoritarian attitudes of the front and the relatively bohemian attitudes of the back. No one in the back of the bus ever knows how long the rest stop will be, no matter how many times the courier has stated it—until told by members

of the middle of the bus. And so on. The edges of the middle of the bus fluctuate, forward and backward, and the middle of the bus expands and contracts accordion-like according to the dynamics of the group as a whole at any point in time. When Group L acts as a single group, everyone is in the middle of the bus. (The middle was probably most extensive on the trip from Innsbruck following the solidifying drug episode.) When the group is acting least like a group, the middle may vanish entirely. (On the continent greatest fragmentation may be seen on the trip into Brussels.) Thus our designation of the middle as the first fifteen seats is somewhat of an abstraction. A greater level of abstraction may be reached by designating the rows on the geographic bus in which the middle sat. These would be rows five through eight. The compensating advantage of this abstraction is the ability to discern the structure underlying the daily variations in group organization. Thus while we can see from day to day any number of changes in individual seating as well as variations in the composition and location of the sub-groups, one can still "feel" this underlying structure. That the kids talked of the bus regions and bus subcultures is indication of the palpable substance of the underlying structure. This generalized abstraction of the kids into groups and the bus into regions was, for all its instantaneous invisibility, entirely real, as much a part of the bus as the aisles and windows, loudspeakers and axles. It is in this sense that the social, typical bus, was also in fact the geographic bus. It may be valuable at this point to summarize the discussion so far.

- 1) Fixers. Fixers have little exploratory drive, and concomitantly little urge to exploit the social environment of the tour or the geographic realities of Europe. Fixers wish to avoid the kids on the bus, and Europe on the ground. Maximization of these tendencies forces the fixer to sit in the front of the bus, and to form very stable, nearly permanent pairs, predominantly with each other.
- 2) Mixers. Mixers have exploratory drive tempered by an unwillingness to become "lost," either in the social or physical environment. They wish to explore the available environments, but trust to the attributes of fluctuating small groups to buffer environmental shock and to inhibit the formation of all-absorbing pairs. On the bus these small groups break into "holding" pairs. Mixers form more pairs than fixers and explorers combined. These pairs endure neither as long as fixer pairs nor as short as



ranger pairs. Since these pairs are most important in maintaining small groups "in suspension" on the bus, they are driven neither to the front nor the back, although they can sit anywhere. However, since fixers have a vested interest in the front, and rangers in the back, mixers tend to the middle. Most mixers sit in the middle and the middle is dominated by mixers.

- 3) Rangers. Rangers have high exploratory drive, and concomitantly great urge to exploit the social environment on the bus and the geographic environment off the bus. Rangers want to get to know as many kids as possible on the bus. This drive reduces the tendency of rangers to form any pairs, especially with each other. Since their motivation is diametrically opposite to that of fixers, they form no pairs with fixers at all. Any pairs formed are of short duration. "Getting to know" involves talking, which behavior drives the rangers away from the front of the bus. Rangers sit in back.

These conclusions have been reached by the analysis of certain behavioral information. If these characteristics are actual attributes of the kids, and if the personalities of the kids are at all integrated, similar variations ought to show up in other forms of behavior. Other behavior about which we know a great deal is mapping behavior. The kids should be susceptible of differentiation into rangers, mixers and fixers using map derived measures. We have two of these: pseudograph measures and grid transformation measures. In the first of these the issue is connective strategy stability. In the second the concern is with the ability to reproduce the standard grid. Underlying both measures is the question of cooperation or eagerness to exploit and explore the mapping exercises.

Obviously we shall expect the rangers to make the most of the opportunity to draw maps. In the first place the mapping exercises provide another "environment" ripe for exploration and exploitation. In the second place, the mapping exercises provide a forum for the reification of geographic exploration. Thus the mapping exercises provide a chance to enhance the value of the initial exploration. Consequently the rangers will be the most frequent mappers. Exploratory drive leads to exploration which leads to exploratory competence. Thus we shall expect; 1) That the ranger will produce the greatest number of maps; 2) That they will produce the most connected maps; 3) That their



Figure 19.2 A Ranger's Map of London: Bob Watson

connective strategy will be the most stable (the practice effect); 4) That they will approximate the standard grid most closely (as a result of extensive exploration); 5) That their maps will cover the largest portion of the environment.

Fixers will be least interested in drawing maps since they will perceive the exercises as an alien "environment" in which they will not wish to become involved. Further, having only slight exploratory urge vis-a-vis the geographic environment they will have little interest in reifying such experience, which experience will also be too limited to lead to the production of maps satisfying the specified criteria (especially the one requesting maps of the city as a whole). However, when they draw maps, they will draw of them of limited, relatively dormocentric regions, thus increasing the likelihood that they will be connected. Thus we shall expect: 1) that the fixers will produce the smallest number of maps; 2) that they will produce maps that are significantly less connected than rangers; 3) that there will be scant strategic stability; 4) that they will approximate the standard grid least closely; 5) that their maps will cover the smallest portion of the environment.

We shall not state the mixer case, since it is likely that they will fall between the fixers and the rangers with one exception; they will try to cover reasonably large areas, but without the extensive exploration of the rangers. Consequently they will be unable to connect these maps up. Since the fixers are mapping more limited areas, fixers may produce more highly connected maps than the mixers, though of more circumscribed areas.

TABLE 19.9

PSEUDOGRAPH BEHAVIOR OF THE RANGERS, MIXERS  
AND FIXERS

Group	Pseudo- graph Class Sums	Pseudo- graph Appear- ances	Average Number Appear- ances	Class per Appear- ance	Class per Kid
Rangers (9)	70	18	2.00	3.89	7.78
Mixers (13)	50	20	1.53	2.50	3.85
Fixers (9)	25	9	1.00	2.78	2.77

Before considering what this table means, let me explain what it is. You will recall that there were five pseudograph classes, numbered from one to five, the fifth being the most stable class. To be considered for any class in any city you had to draw at least three maps of that city. If you did draw at least three maps of any city, you "appeared" in the pseudograph analysis for that city. The maximum number of appearances per kid would thus be three (one for each city) and the maximum number of appearances that could be achieved by any group can be obtained by multiplying the number of kids by three. Thus, the rangers appeared in the analysis 18 times out of a maximum potential of 27. The average number of appearances is derived by dividing the number of appearances by the number of kids in the group. Thus the nine rangers achieved an average of two eighteen times by appearing in the analysis. Average class per appearance is derived by dividing the class sums by the number of appearances. This is the average pseudograph class for the group. The class per kid is derived by dividing the class sums by the number of kids in the group. This score combines a cooperation weighting (by dividing by all the kids, some of whom did not map) with the average pseudograph class per group (represented by the class sum). Thus, groups in which large numbers of kids did not map, will find the average group performance pulled down. This measure can stand as a summary of the preceding measures.

The over-all appearance of the table would seem to support our contentions about the behavior of rangers, mixers and fixers. The rangers produced the greatest number of maps as measured by their number of appearances in the pseudograph analysis. Nine rangers produced almost as many maps as the thirteen mixers and far more than the same number of fixers. In per kid terms, the rangers took advantage of two out of the three potential opportunities, while the fixers took advantage of one out of three. The mixers, predictably, were right in the middle.

Rangers also produced the most connected maps as evidenced by the enormous class sum achieved, as well as by their high score in class per appearance. The average class achieved by the rangers was almost Pseudograph Class 4, implying a large number of Class 5 mappers with highly connected maps and stable approaches to the mapping problem. As anticipated, the fixers scored slightly higher than mixers on the average, when they bothered to map, though both mixers and fixers scored significantly lower than rangers. In the class per kid scores, which take into account the number of kids mapping, it can be seen that the three groups are distinct in the expected direction, though mixers are closer to fixers than anticipated. In general it can be stated that rangers were more frequent, better mappers than either other group,

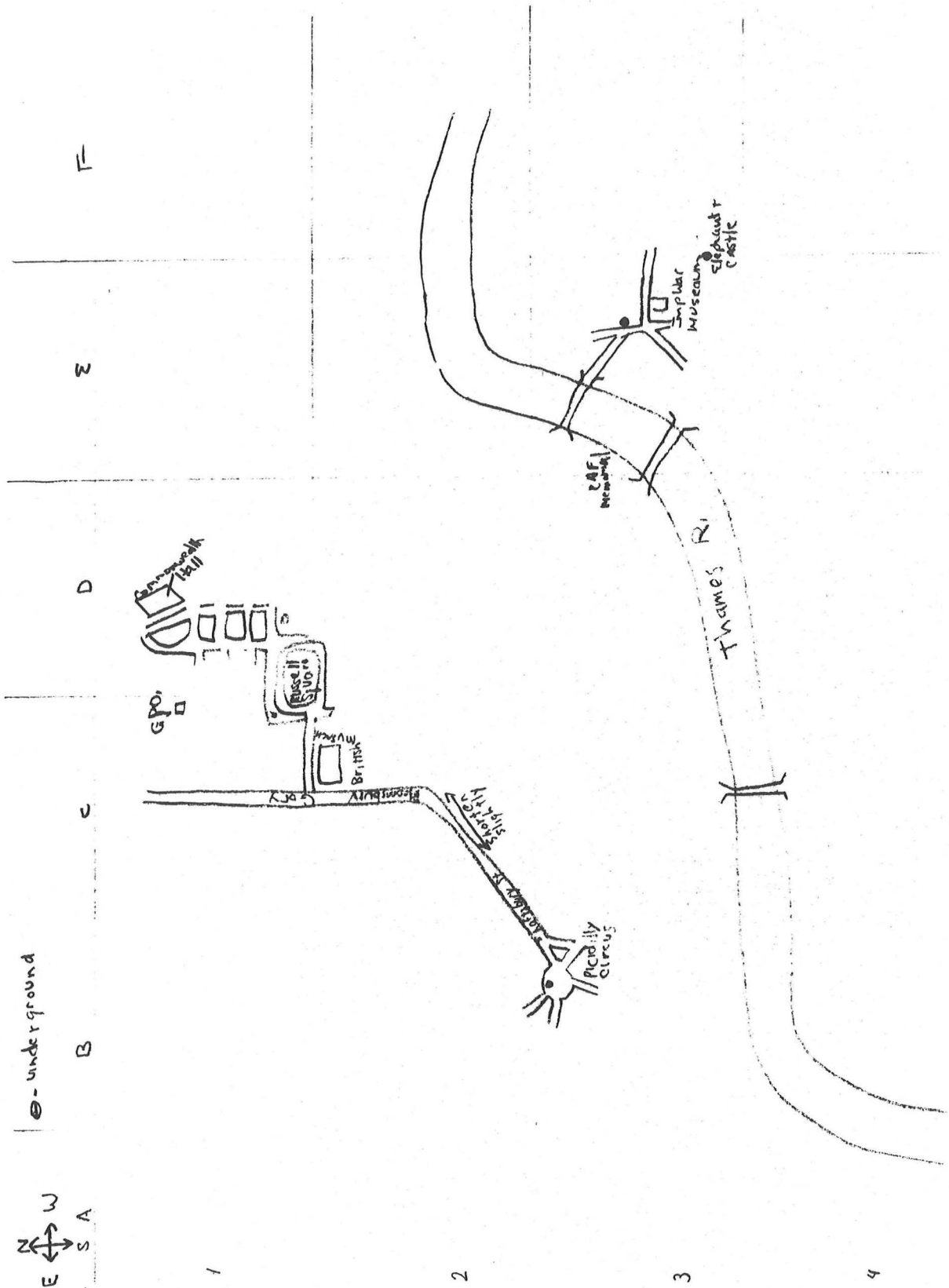


Figure 19.3 A Fixer's Map of London: Porter Portman

and that mixers were more frequent mappers than fixers, though performance scores are quite similar otherwise for these two groups.

It might at this point be objected that analysis of the pseudograph scores should have proceeded along more independent lines than were pursued above. There we simply assumed the validity of the ranger, mixer, fixer trichotomy and hoped that the average group scores would be sufficiently differentiated to support our suggestions. A more independent approach would have been to graph kids according to seat scores and pseudograph scores, thus avoiding the loss of individual information entailed in averaging. To validate the approach taken above, kids were graphed according to simple number of kids sat next to (undifferentiated according to average seat number—the raw portion of Table 19.1) and individual pseudograph class sums (the rawest pseudograph measure). Analysis of the resultant graph revealed the existence of four—not three—groups. One group, with low social activity and low pseudograph scores, contained ten kids, nine of them fixers. The next group contained eleven kids, all mixers as defined above. The third group contained nine kids, eight of them rangers. The fourth group was occupied only by David Abrams, achiever of the highest pseudograph sum and the highest social activity score. Except for the constriction of the mixer group, the results achieved by dividing the social activity scores controlled by average seat number into septiles and then aggregating them, prove to parallel the above graph analysis. David Abrams may be special, but he is simply a special ranger. Without going further I think it important to state that such independent analyses will support our division of the kids into fixers, mixers and rangers generally, although there will likely be local movements around the edges of the sub-groups. This affirms the contention that all our measured behaviors are nothing but refractions of the underlying personality structure of the individual kids.

TABLE 19.10

GRID TRANSFORMATION BEHAVIOR OF THE RANGERS,  
MIXERS AND FIXERS

Group	Grid Transformation Class Sums	Average Class per Group Member
Ranger	19.3	2.14
Mixer	26.0	2.00
Fixer	15.6	1.73

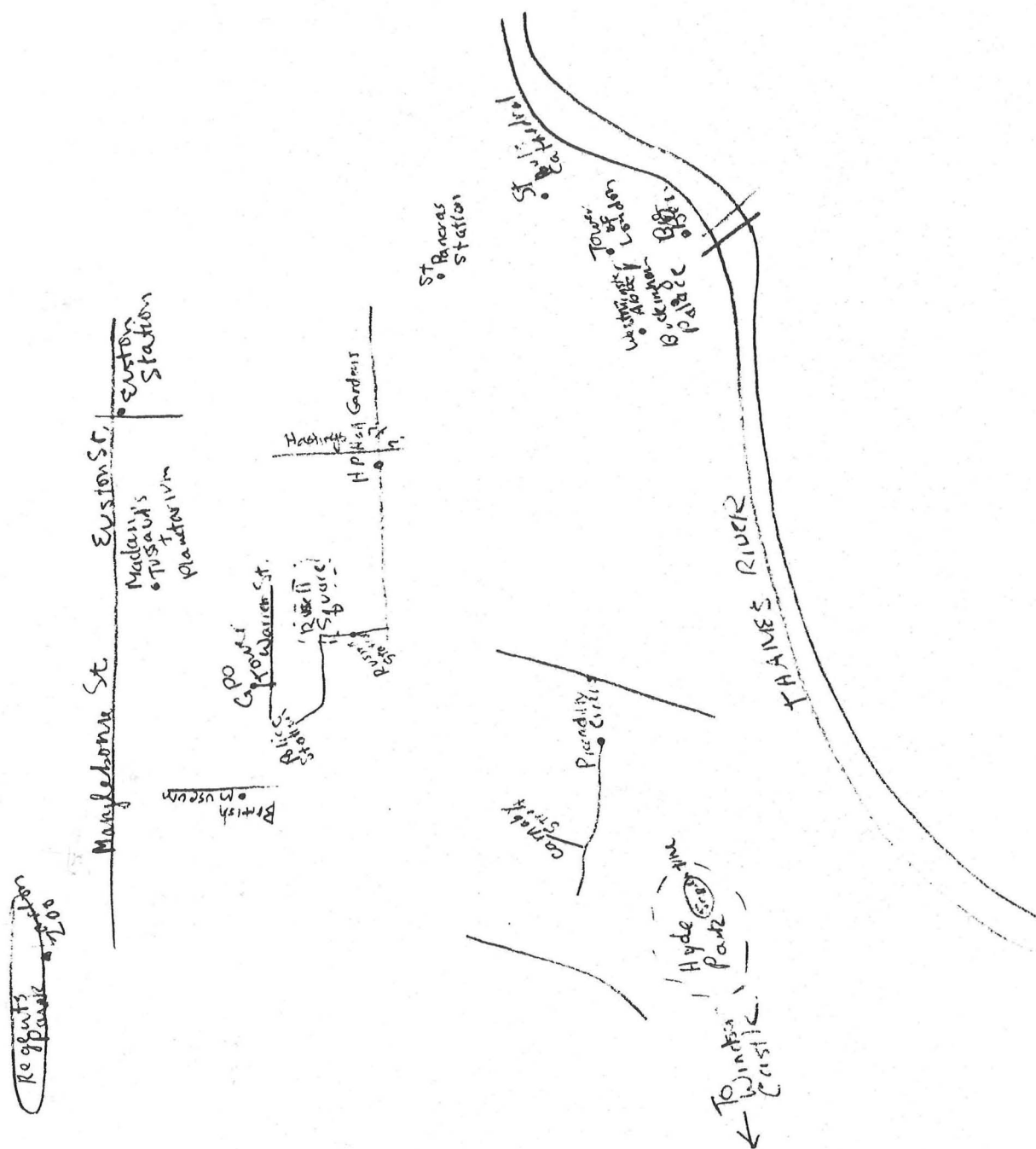


Figure 19.4 A Mixer's Map of London: Susan Lincoln

You will recall that each map was sorted into one of four classes based on its approximation of the standard grid. Numbered one through four, the lowest numbered class contained the worst approximations of the grid, while the highest contained the best. All of a kid's maps were averaged to give him his grid transformation score. These scores have been summed for the groups and appear above as class sums. This sum has been divided by the number of kids in the group to achieve a group average. The variation among the above scores is not as great as was the case for the pseudograph measures, thus bearing out our earlier contention that there was meager correlation between the pseudograph analysis and the grid transformation analysis. Nonetheless, the trend is in the right direction so as to allow me to say that rangers approximate the standard grid better than mixers and mixers better than fixers. Thus we have now differentiated the kids into three groups along the following dimensions: 1) social activity; 2) bus location; 3) pair behavior; 4) map exercise exploitation; 5) connectivity of mapped parts; 6) ability to reproduce the standard grid. I have no hesitation in saying that as far as group measures are concerned, that we have shown that mapping behavior is related to bus behavior, and that hence it is very likely that these two distinctive forms of behavior spring from a common source; namely, the personality of the kids.

However, as the eminent statistician L.C. Tippett points out, "Statistics is essentially totalitarian because it is not concerned with individual values of even the few characters measured, but only with classes" (in Newman, 1956, 1479). In gaining some appreciation of the more general aspects of the connections between the maps and other forms of behavior, and in gaining some view of the overall structure underlying the composition of the group, we have ruthlessly sacrificed truth to actual living breathing people. I wish to illustrate this by discussing the particular cases of Erica Cruz and Karl Prinz, not only because they are the fixers sitting in the back of the bus, but also because in them are encapsulated many examples of the individual characteristics of others. You see, Erica and Karl fell in love.

I would have said that Karl was an excellent example of a fixer. In London he seemed to be much of a loner, not even closely attached to his fellow Milwaukeean and ex-school mate, Sven Heller. In the way he regarded the mapping, I felt that he was acting like Porter Portman, who felt that our simplistic approach to mapping was beneath his dignity as an expert in U.S. Army mapping techniques. In a similar fashion, Karl bandied about his supposed expertise, gained, reportedly, in the Boy Scouts. Both of them initially refused to draw maps for these reasons, though both produced less than respectable products when finally cajoled into trying. Karl's was probably the worst



we collected in toto. Also, like Porter, Karl buried himself on the bus, only in Karl's case it was the very back corner that seemed most secure. In fact, in the early part of the trip, when most of the kids were still relative strangers overall, his back seat did provide him with a strong defensive position. It was only when the rangers asserted their right to the back of the bus (on hitting the continent) that his isolation was jeopardized, and even then the seat next to him was more often empty than not. In fact, Karl was the Porter Portman of the back.

Meanwhile, Erica was acting extremely ranger-like. Prior to meeting Karl, Erica had sat with five different kids. Had she maintained this pace of social activity, she would have emerged at the top of the social activity rankings, and in fact had almost paired with Vittoria Palazzo (sitting with her five times-- Karl never got this close to anyone but Erica). If not a high class stable mapper, she was an eager mapper, drawing three maps of London, while pursuing her steady course of decreasing fragmentation. On several occasions she proved to be gregarious and independent. All in all, as we left London, I had put her down as a promising ranger.

Like every other boy, Karl sat next to a girl on the gondola ride in Venice, and like the rest of them sat next to her on the return to Venice the next morning. (This was the time Portman abandoned the front row, moving back to seat 14 to sit with Nybia Pagan.) Unlike any of the rest, Karl sat next to Erica on twenty-four of the following thirty-two trips. In the same span of time, no other boy-girl pair was together nearly as often. Karl and Erica sat together in the back of the bus, where Karl had always sat (Erica had sat there sixteen of the preceding twenty trips). It is quite easy to rationalize their behavior in terms of our foregoing paradigm, to see them as fixers. Karl was a fixer, exploiting the relative strangerliness of the group and the strong defensive position of the back of the bus (under those conditions) to isolate himself from the rest, and failing to exploit the possibilities of the mapping exercises in true fixer fashion. Whether Erica was also a fixer, a fixer whose search for someone to cling to led her to examine a large number of kids initially and who in the fullness of time would have found such a person, is something we shall never know, knowing only that she did find someone to cling to and that, though she drew us many maps, drew maps of a low connective class which scarcely approximated the reference grid at all. A less negative interpretation of her relationship with Karl that, not clinging, she was opting to explore, to range deep within a single person instead of across many, would throw further confusion around any assessment of her behavior. But this is all after the fact, for as I have indicated there, in Europe, I saw Erica as a ranger and Karl as a blank.



When, on the trip into Rome, I discussed the maps of each kid with him, I discussed the maps with Karl and Erica together, for they were together, allowing them to compare and contrast their maps not only with mine and Group K's, but also with each other's, and, as one might have supposed, Karl deprecated his product and praised Erica's while she struggled valiantly to find something nice to say about his. Karl could not be blinded to the fact that Erica was at least trying to draw maps, and trying hard, while he had failed to try at all. As a result, Erica repeated in Rome her performance in London, while Karl exceeded most of the kids and drew us three well-connected maps that reproduced the standard grid with incredible fidelity. There may have been, in the end, something to that Boy Scout story, for as far as the maps were concerned, Karl had in a single bound leaped to the front of the class, so that now it might have appeared that Erica were more the fixer than Karl, whose light, we could now see, had simply been hidden in a barrel. Then, when the chance came to cross the Rubicon of the Play in Rome, Erica and Karl crossed gladly it would seem, with vigor and suggestions, the only fixers to do so, just as they were the only fixers to sit in the back of the bus, so that, on leaving Rome, they had all the badges that rangers could wear, except for Erica's low map scores, and even there, Erica was one of the three kids to manifest a transcendent mapping stability by behaving in Rome as in London.

Had they moved to the front of the bus at this point they would have found themselves among angry fixers incapable of accepting the fact that they had participated in the Play, as well as hostile T-C's who would have regarded them, if not absolutely disloyal, at least and probably more insultingly, seriously misguided. Instead they remained in the back of the bus, among the overtly disloyal, among the Play's authors, where sympathy, if not for the devil then at least for the unannointed, reigned supreme. They relaxed. Karl, under the pressure of having to share the window seat with Erica, as well as the general high demand for the back row among the recently disenfranchised, began to sit next to different kids. He talked, probably more about himself than was entirely comfortable, but nonetheless interacted with strange kids, and one might have said, looking over his soul, that he was coming out. Always somewhat serious, Karl and Erica, in their sympathy for outcasts like themselves, were able to find themselves in company with the group's pariahs, Nybia and Janine for continuing to run the project against the express will of the authorities, and Mrs. Needham, for sanctioning such behavior. The five of them comprised in those sad sunny days a group at once mature and purposeful, relaxed and invigorating. By the end, Karl and Erica had all the taint of Rangers that David Abrams had, and maybe even more, for in the end they transcended the group in

their togetherness, Karl crossing the winter wastes of America to visit Erica in New York, the one participant in the reunion to have exerted most, to have moved farthest, to reassert his love. I can see fixers clinging to one another across an aisle or even a crowded room, but across America? More and more Erica and Karl appear less and less to be fixers, than rangers, enthralled in the only really serious business in life.

But this variation between Karl and Erica—people—and Karl and Erica—fixers—need cause no dismay. There is no tendency here to cause me to upbraid myself, to cast to the winds the carefully constructed, amply supported dissection of Group L into fixers, mixers and rangers, for this dissection was never really intended to "explain" individuals, but rather groups, and to the extent that groups are ipso facto totalitarian entities, so too our measures of them, our metaphors for them, our knowledge from them, will be totalitarian as well. It can, perhaps, be suggested that totalitarianism is not the attribute of only certain, self-articulate, overtly organized groups, but of all groups whatsoever their tenets of organization, for all groups, out of whatsoever collectivity of consciences, expresses a group will—no mystical notion—that manifests itself in behavior, in seat choices, in including and excluding, in pairing, in card-playing and sleeping and eating, in sitting silent staring. But such individual behavior is group behavior only taken together, and taking together destroys the individual behavior, warps it, distorts it, not maliciously, nor necessarily intentionally, but by its very nature. Looking at groups, we fail to see the people that make it up, just as a view of the ocean obscures the individual characteristics of all the little drops that make it up. We make a choice—not irrevocable—to look at aggregates or individuals, and depending on which we choose we see what we see. When we look at Karl or Erica we see something of Karl and Erica, but when we look at Group L we see only something of Group L, measures of central tendency, and ranges around that middle. Were each member of Group L to match in himself the characteristics of the group at large, we would have, not a group, but a monolith. In the end, we relax in the knowledge that Erica is Erica, Karl is Karl, and Group L is Group L.

## II

There has been no time in which to perform a detailed analysis of the post-trip maps, and indeed they are still continuing to come in. However, it will be worthwhile to view a few. Some comments of a highly speculative nature might also be essayed.

Figures 19.5 through 19.10 are remembered maps of London. Each map blank that was sent out was accompanied by the List of Places

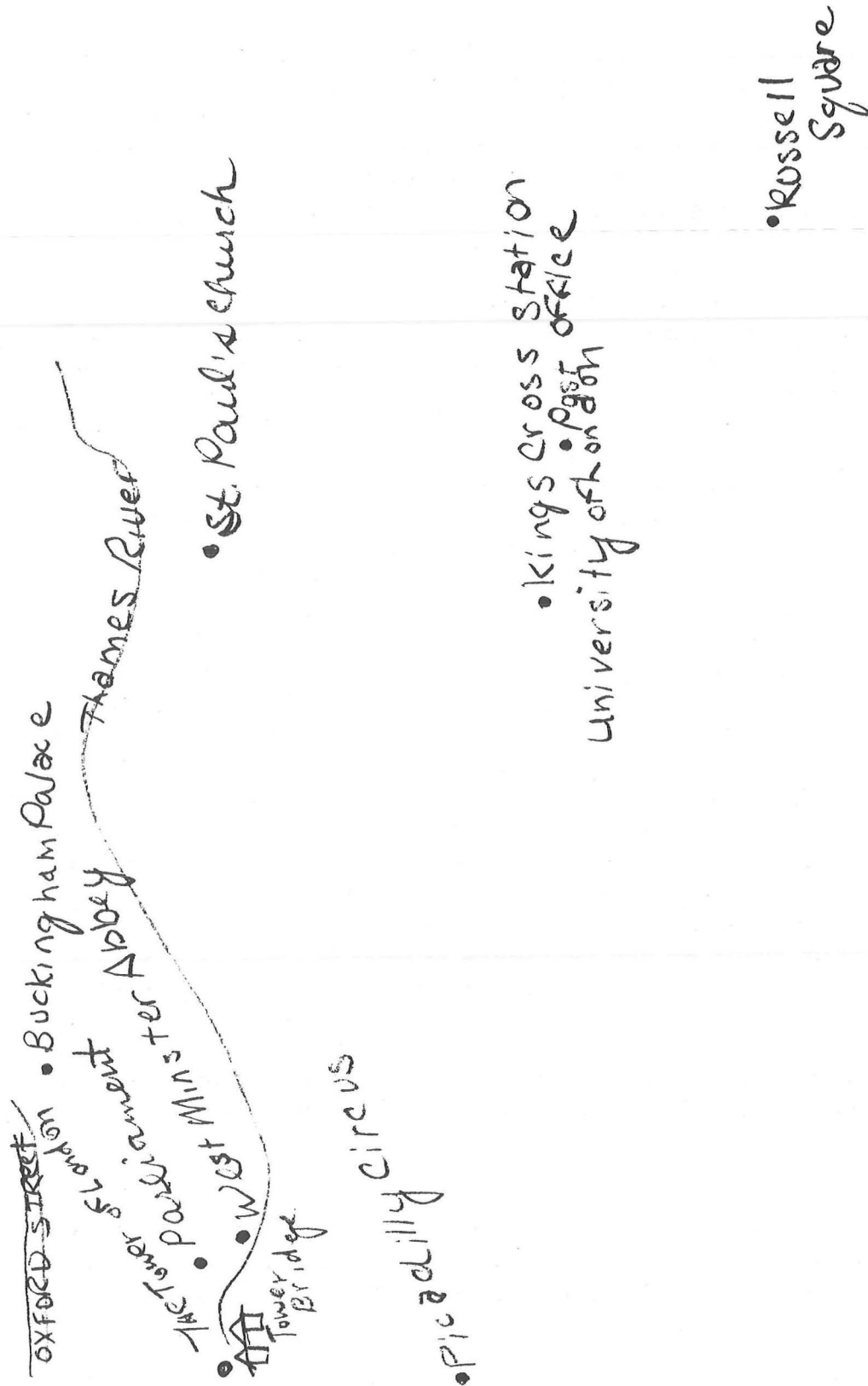


Figure 19.5 Joy Gray's Remembered Map of London

ST PANCRAS  
• STATION?  
• HUGHES PARRY HALL  
• ? DISTANCE  
POT

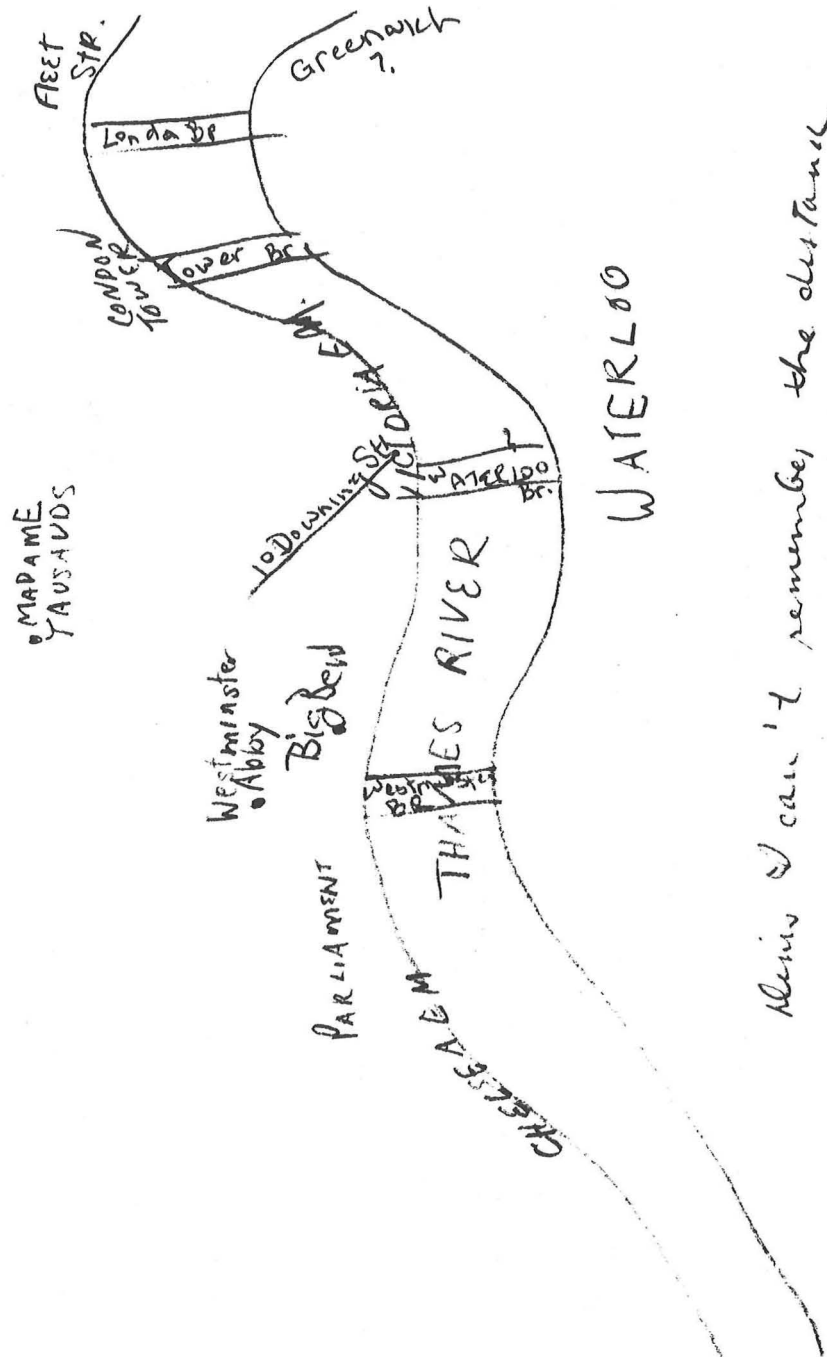


Figure 19.6 Vittoria Palazzo's Remembered Map of London

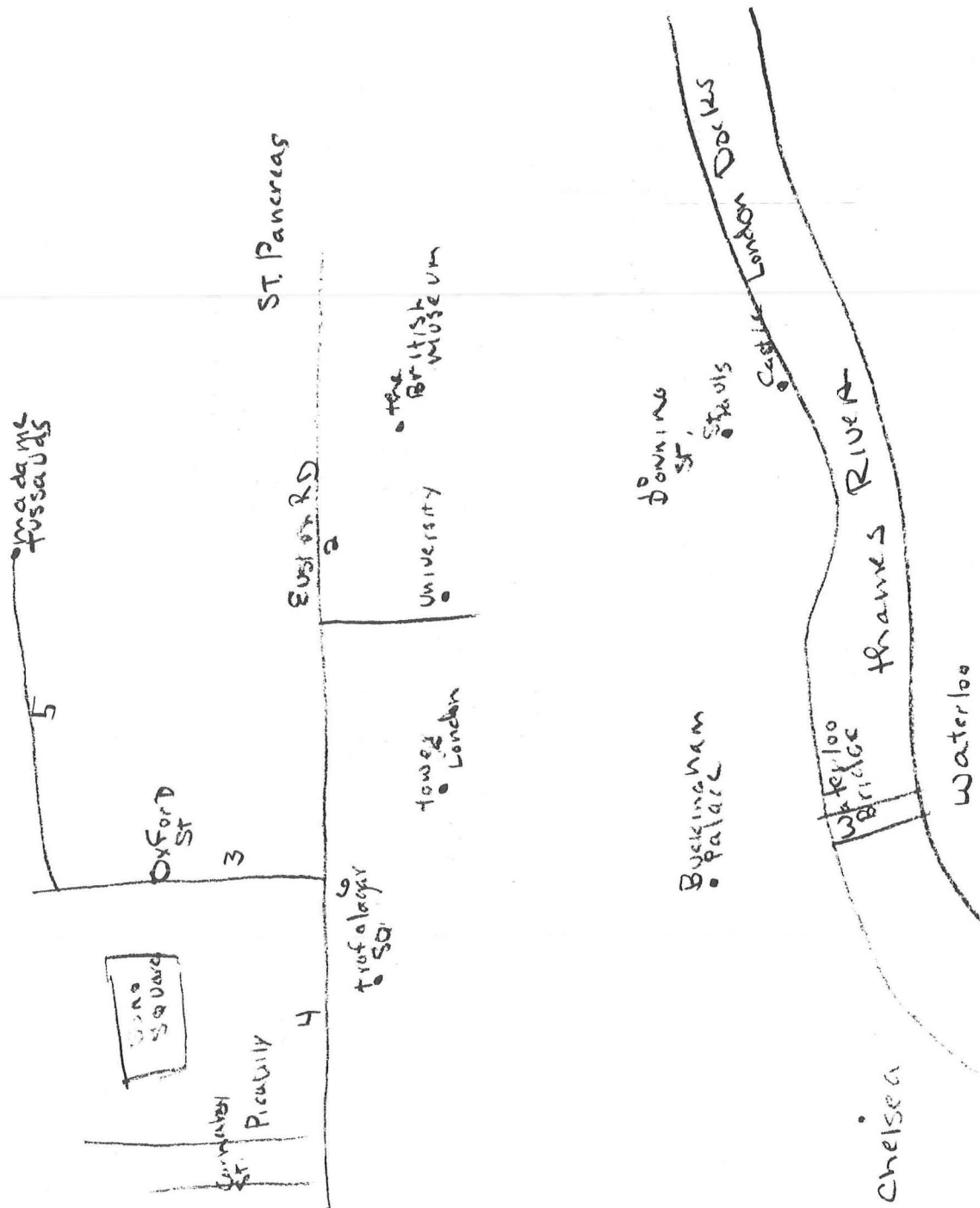


Figure 19.7 Leslie Casyk's Remembered Map of London

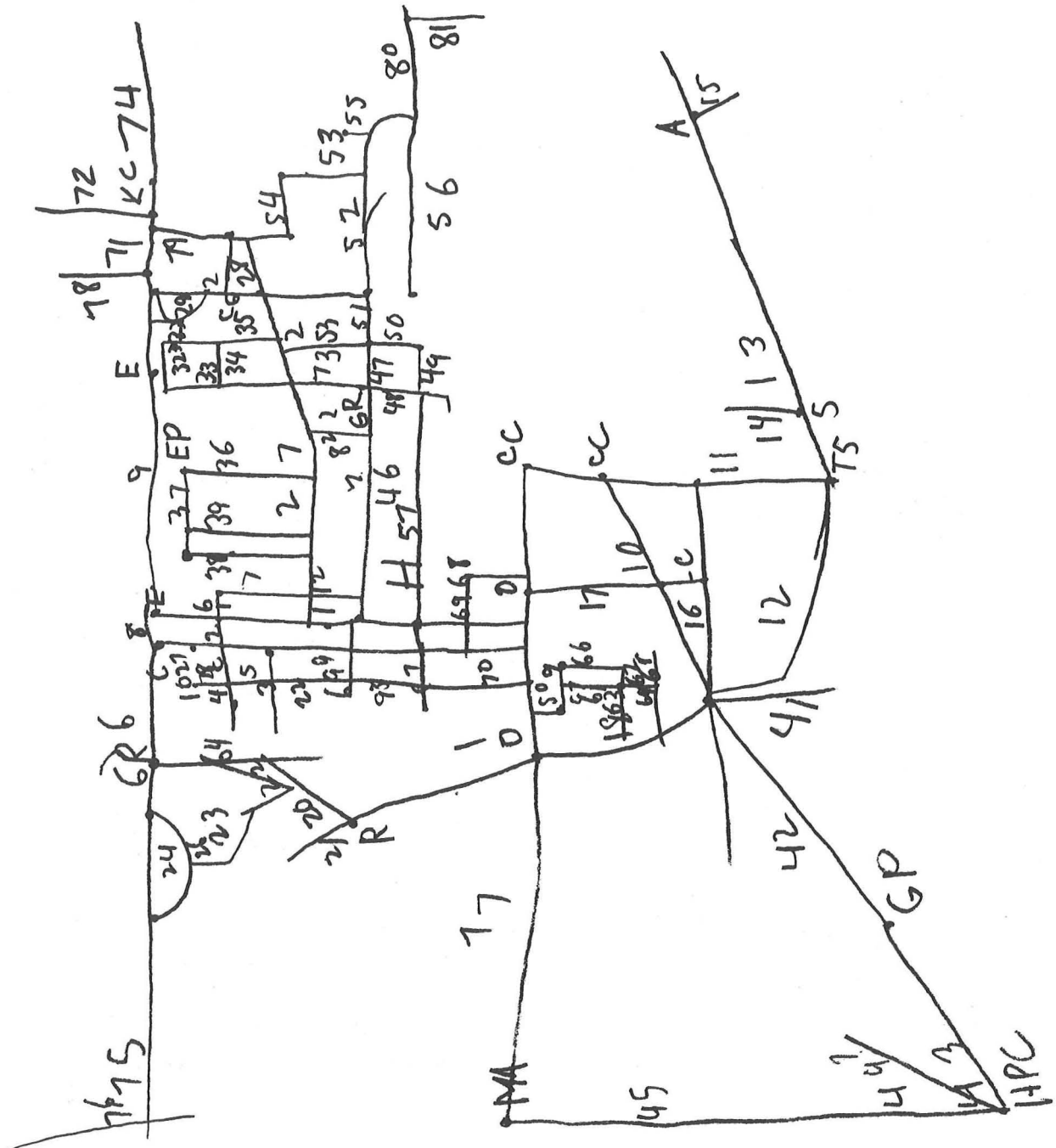


Figure 19.8 David Abrams' Remembered Map of London

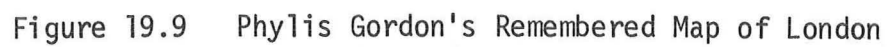


Figure 19.10 Janine Eber's Remembered Map of London



for London, along with an adjective checklist and a bus seating chart. The order of presentation was bus seating chart first, then adjective checklist and finally the map. The intention was to get the kids back into London in their memories before having them draw the maps. Unaided by the grid analysis and other techniques, I think you can still get the picture. Basically the kids are still hitting the ball in the same ballpark. There has been no drastic attrition of places, no significant deterioration of relative location. David Abrams was capable of practically reproducing his original third London map and Janine Eber's is her best map of all. In my excitement over David's map I called him up and asked him about its production. He said that once he got going it only took him fifteen minutes to complete the map. This surprised him considerably because it had always taken him longer to draw the map while in London. He also felt it was otherwise more painless than it had been working in London.

The suggestion that temporal distance from the subject made cognition of the subject easier was not borne out by Janine, although she is contradicted by her map. The map is her most integrated, most detailed drawing of London. However, she writes:

"First I went through the list to check off points I knew the location of. Now I draw the map. It occurred to me that Oxford Street ran into Euston, right? Or it comes close, so I don't know how to draw it. I never could get the stuff by the river right! This is a terrible map—I feel like I'm just putting down places. I'm not sure of most of them.

Just looked at a map of London to see how I did and yuck! It's horrible. Of course, I never did know where the Tower of London, Westminster, and Oxford and Regent Streets were...!

With her comments in mind, look at Figure 19.10. She did not connect either Oxford or Regent Streets with Euston. Obviously she simply felt too unsure to go ahead with her plan. She here articulates a confusion noted during the grid analysis between Regent and Oxford Street, even drawing "Is this Oxford Street?" on what is really Regent Street. She, like so many others, understood that there was a relationship between these streets, but was unable to ever get it straight. This is the sort of information on the remembered maps: articulation, crystallization of the major problems in the cognition of the visited cities. Notice that Janine has also moved Westminster and the Tower of London back together. The same old p-cliff, although she has now left London Bridge behind.

In the second mailed installment we had the kids draw maps of Innsbruck—hitherto unmapped—and Venice, but without a list of place names. David Abrams' remembered map of Innsbruck is shown in Figure 19.11. While a few kids were able to produce such maps of Innsbruck, most were entirely fragmented and showed little detail, as might be expected on a first map generally. The detail that was shown included predominantly those places visited on the sightseeing tour of Innsbruck with the addition of the parks along the River Inn where so much socializing took place. Vittoria Palazzo was alone in labeling the Inn River the "Blue Danube." Janine Eber's maps of Innsbruck and Venice comprise Figures 19.12 and 19.13. A glance at these shows that the process Janine started in Rome has continued. She is becoming increasingly involved with the project instead of less so, and has clearly become a Ranger. This begins to establish another characteristic of the Ranger-Mixer-Fixer trichotomy, that a Ranger will push his exploratory drive into realms of memory as well as into the social fabric and physical structure of existence. Janine writes:

Here's my running commentary on the checklists, maps and bus charts so you'll know what I'm going through(!): First of all I sat and thought about Innsbruck. We never did maps on the city—don't remember doing a checklist either. (We did. DW)

We came in from the north—down that big mountain—saw several danger signs, a car avec a trailer which didn't make it, then to the hotel—built in 1452 or 1453 or some year like that. It just occurred to me that because I didn't go all the way up the mountain I didn't remember Port's escapade, but only heard about it. But I do remember the hassle about the drugs (Scene I of "Was It Fate" or "The History of Group L"—a play in five acts....).

Anyway, back to the city. I remember the park where my group had a picnic and a water-fight (I was not drunk!!!); going up the mountain by cable car and train; the Inn River; the walk back from the mountain trip avec Sven, Betty, Claire, Susan, Nybia (??—no I guess not), Vanessa—maybe Erica and Karl. I'm not sure. We stopped at a covered bridge (remember that?)—Hey, that's the bridge that Cliff, Vannessa and I had to cross to be with the rest of "our group" and go to another park...

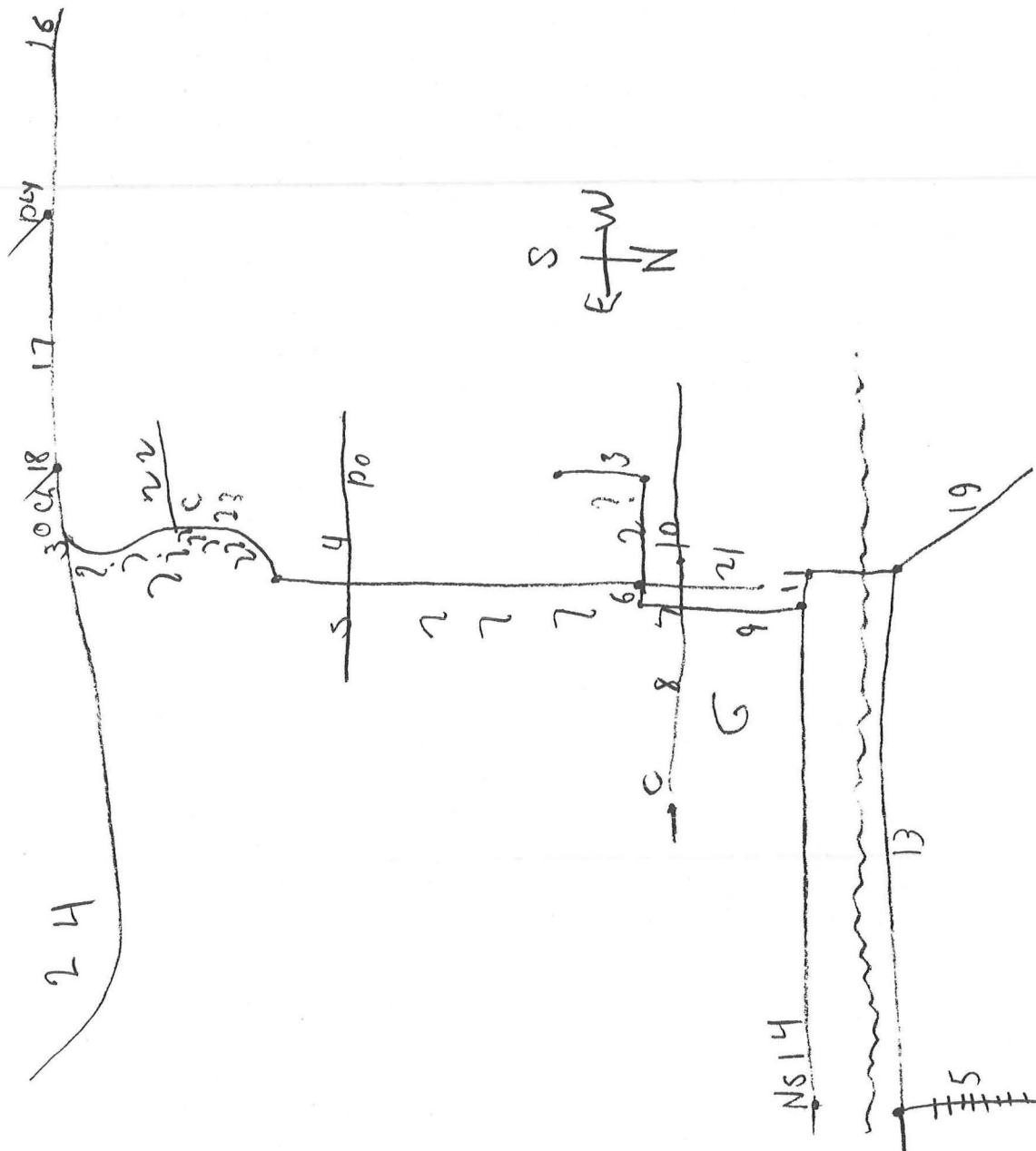


Figure 19.11 David Abrams' Remembered Map of Innsbruck

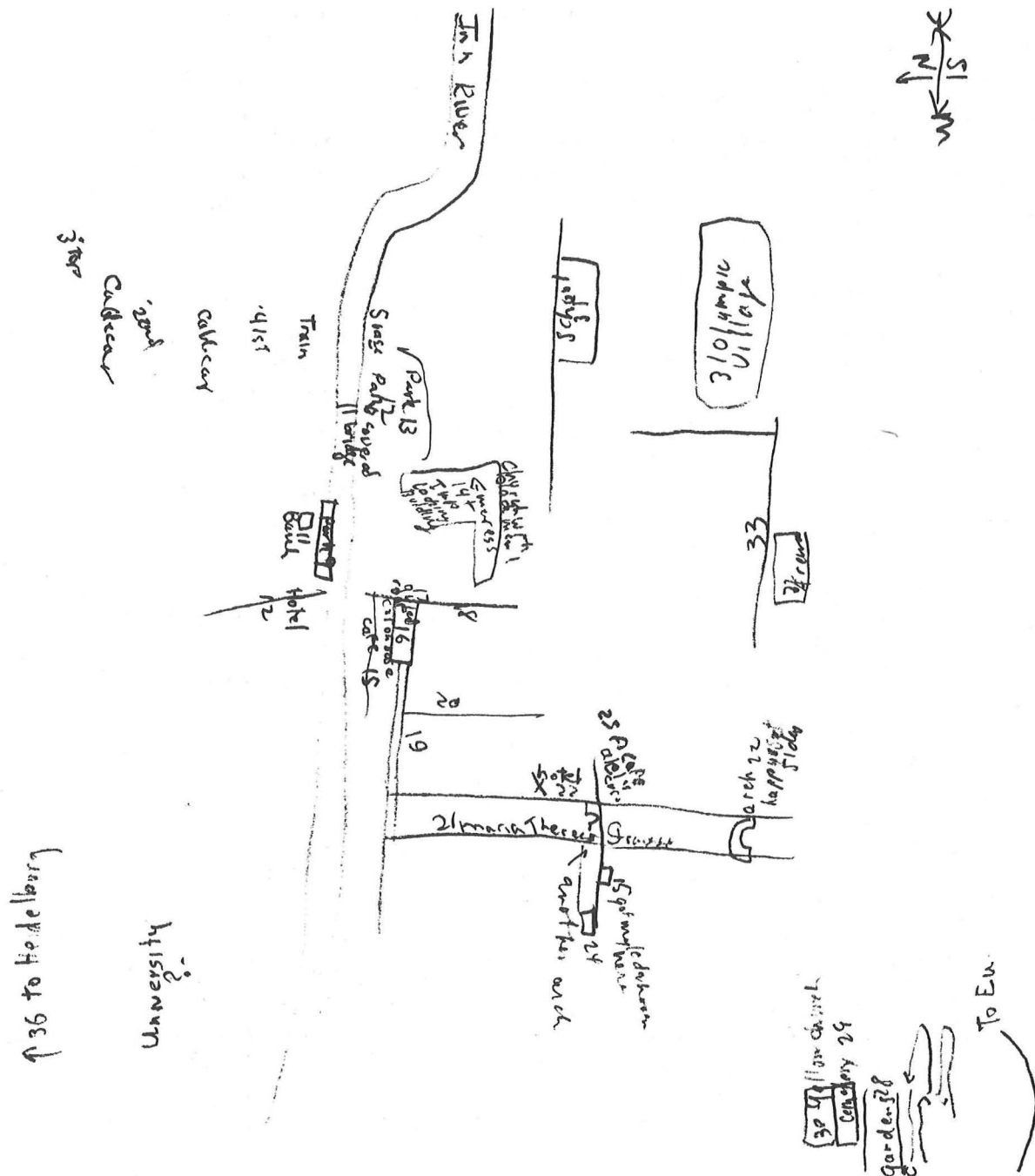


Figure 19.12 Janine Eber's Remembered Map of Innsbruck

Janine goes on to describe in minute detail for several pages her memories of Innsbruck. There can be little question but that the trip to Europe was and is still continuing, nor can there be much question about the role played by our incessant map assignments. These continue to play the educational role they had played all along, providing now an opportunity to systematically recall and reorganize and reify previous experience. In common with most of the kids, Janine liked the Alpine experiences best of all and goes into raptures about the mountains. Then she describes in detail the composition of her map.

It's strange—I remember only being able to see the whole valley from the north side (when we went up by cable car) and only the village from the ski jump. Therefore, I had to draw the River first, holding the paper south to north (upside down) then turn it right side up to do the rest of it.

Just decided to do most of the map upside down, 'cos we always went south (across river) to shop, sightsee et cetera.

Oh no! I have to start all over again. I don't have room east of what I put on the map already for more stuff. Besides, turning it rightside up and positioning myself and the map... Ugh!

Hope it's okay if I just add the rest on another sheet instead of drawing the whole thing smaller.

Well, I guess I'd better make the whole thing smaller and cancel the added sheet idea.

Oh yes, the school where we had those horrendous lectures—except for the one on music—Hey! Those were the ones where Odin fell asleep. Now, boy, I wish you were here to answer my questions. Do you want me to turn all the names around to make them right side up??? This has already taken me 45 minutes and I haven't started the overlays yet.

Okay, just so you know: read numbers 1 through 26 holding the map with north toward you and 26 through 35 with north away from you. As you know, I never did the maps exactly as you instructed. I find it hard to decide on a central point. The hotel is the center

of my activity, yet not the center of town. Oh. I see it's to be the center of town. Well, in Innsbruck I don't recall a center, we just went out and in all over.

This is ridiculous. I can't put vista symbols all over the map, but pretend that they are. See the list on the tracing paper for general statements referring to the whole map.

Okay. Map done. Took me 1 hour total.

Then Janine goes through the entire process all over for the next phase of the trip. The Venice map only took her fifteen minutes to draw. She says "Venice makes me feel very sad."

Janine's running commentary on the creation of these maps may easily be the most valuable single piece of information gathered by the project. She manages to attack nearly every issue involved in sketch mapping explicitly and articulately. The question of orientation is clearly dealt with, confusion resulting from having to add different perspectives together into a synthetic whole. She addresses herself to the issue of what center to use, her own center or some consensual center. She draws a clear picture of the problem of false starts and the problems of scale. And she shows by her effort the role affection has in the creation of mental maps.

The next mailing that went out included a second map request for Venice. This time we included a list of place names. We wanted some way of independently assessing the role of the list on kids within the same group. Figures 19.14 and 19.15 show such maps of Venice. There was a marked increase in detail from the listless map to the listed map, and a corresponding increase in primitive veridicality. Janine pinpointed a real problem causing variation in the images of London, Rome and Paris. She notes that names in London stuck with her better; that names in Rome slipped between her fingers because she didn't know the language at all; that her years of school French were a great help in Paris. She points out that this is especially true of streets, since the names of most monuments are well-known in English. She writes of this last exercise:

I know these maps have declined since the last ones. When I saw these I said: "Oh, no! I can't do a map of Venice and Rome! But I did, anyway. They're terrible. I can see in my mind everything, but there are no labels on my memory!





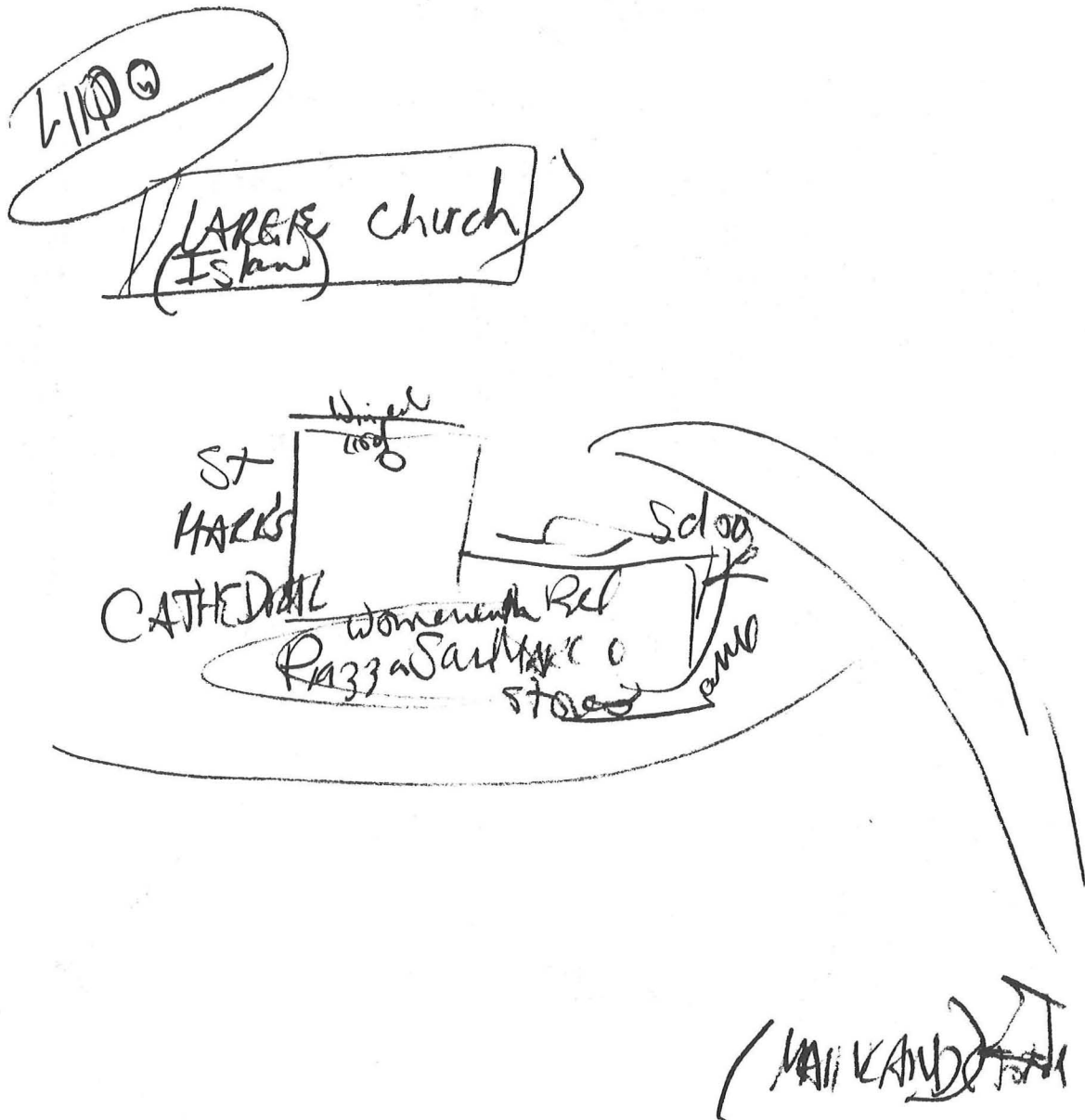


Figure 19.14 Desmond Jencks' Remembered Map of Venice (without list of places)

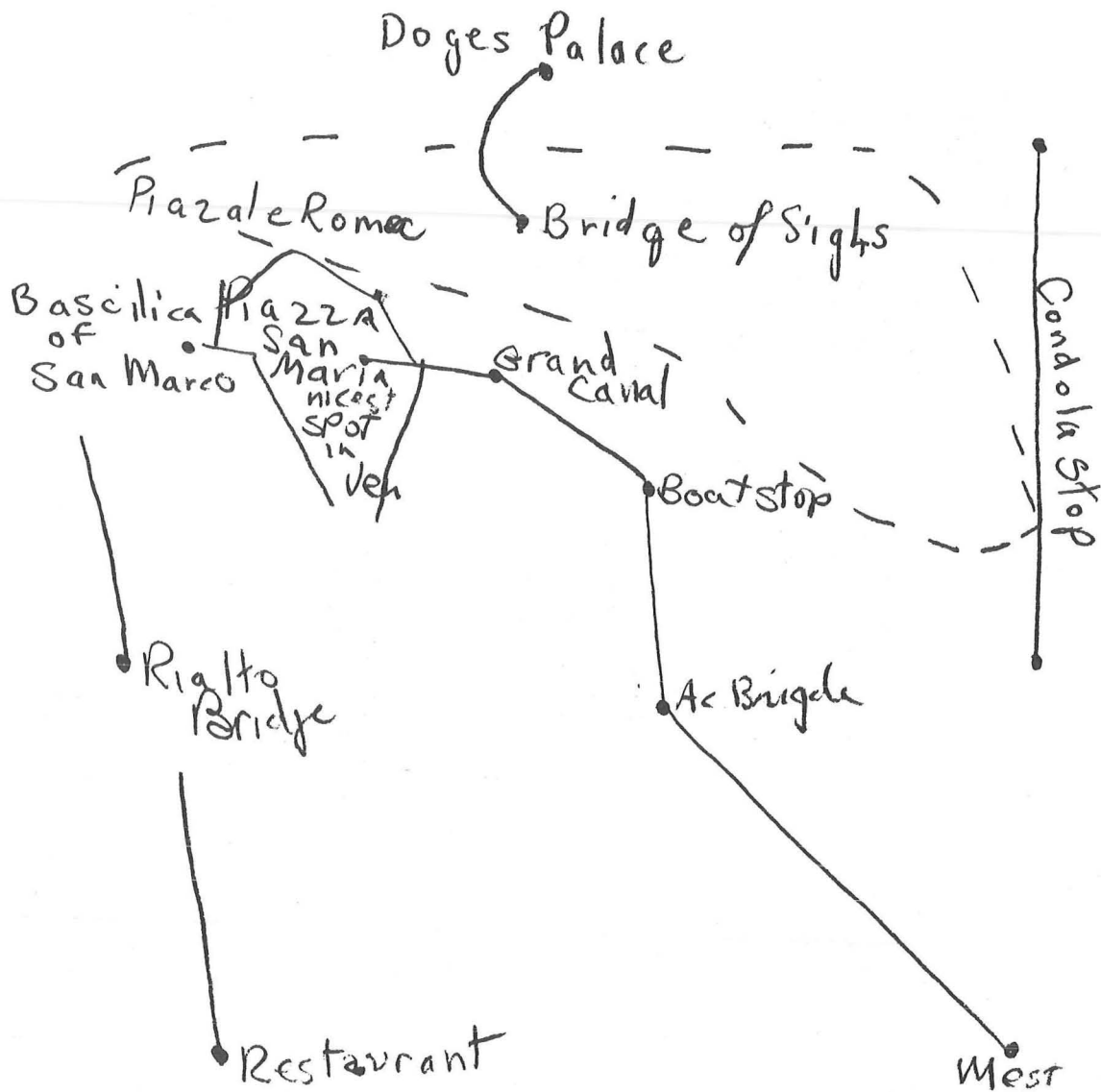


Figure 19.15 Vittoria Palazzo's Remembered Map of Venice (with list of places)

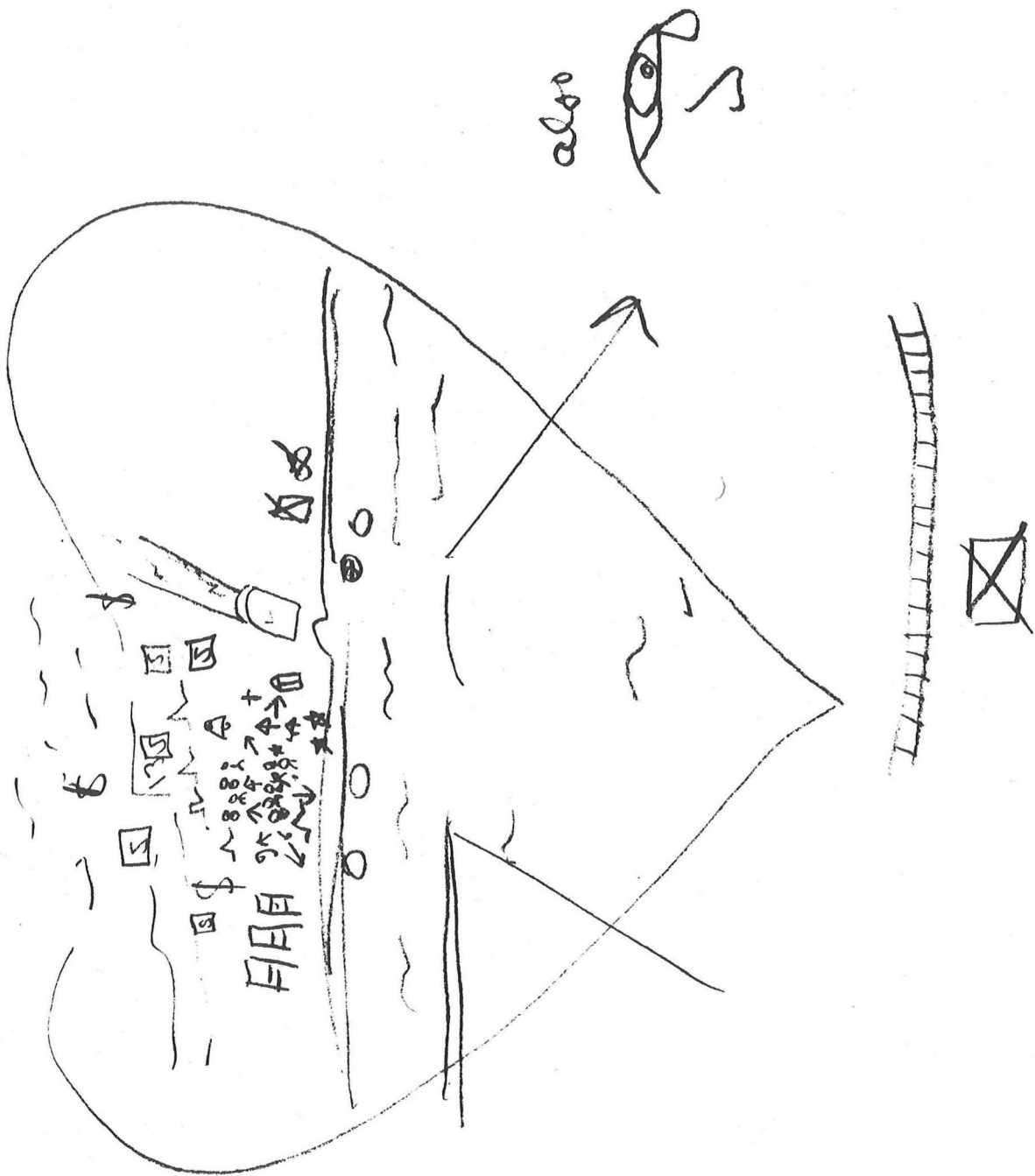


Figure 19.16 Janine Eber's Overlay of Second Remembered Map of Venice  
(with list of places)

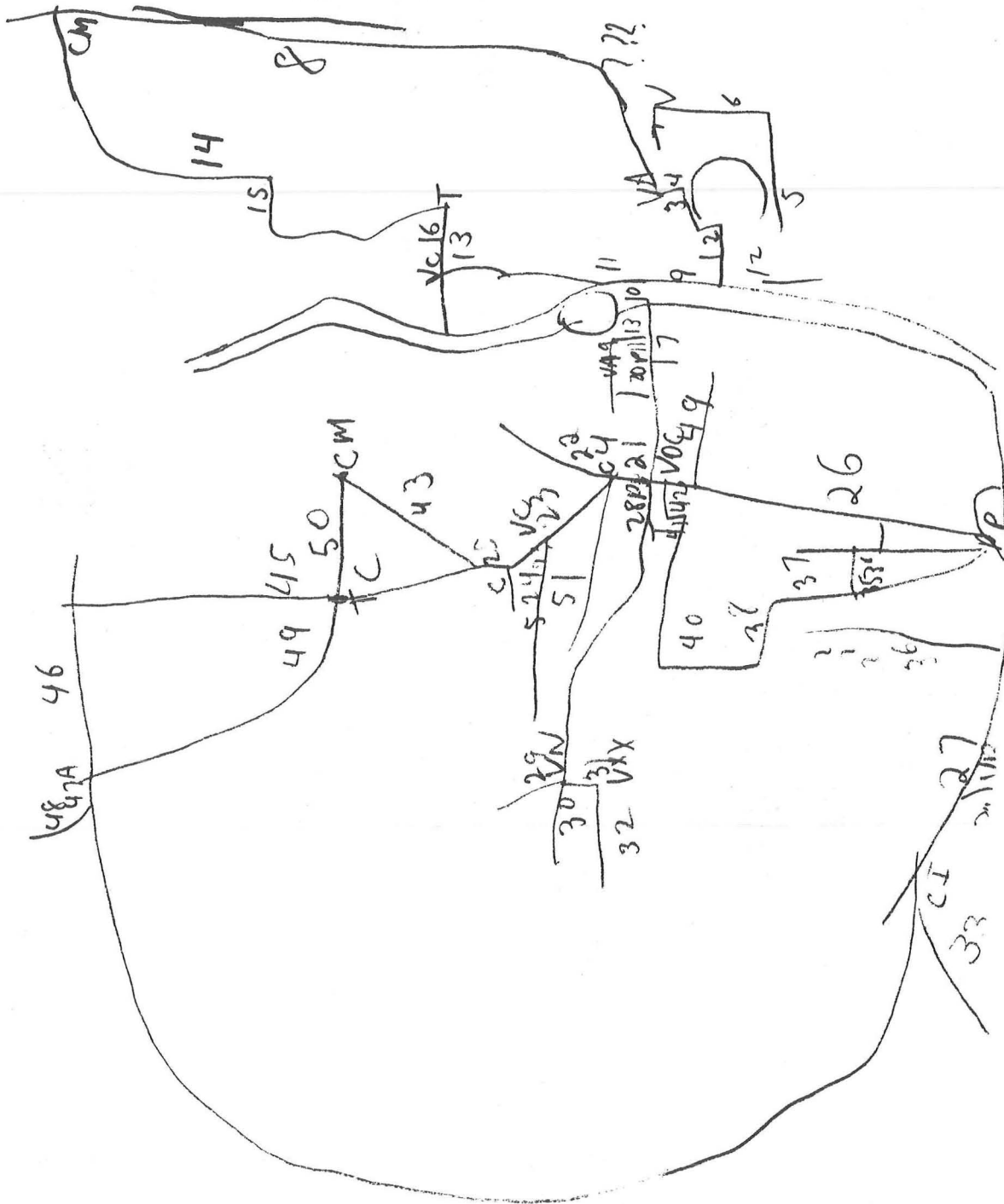


Figure 19.17 David Abrams' Remembered Map of Rome

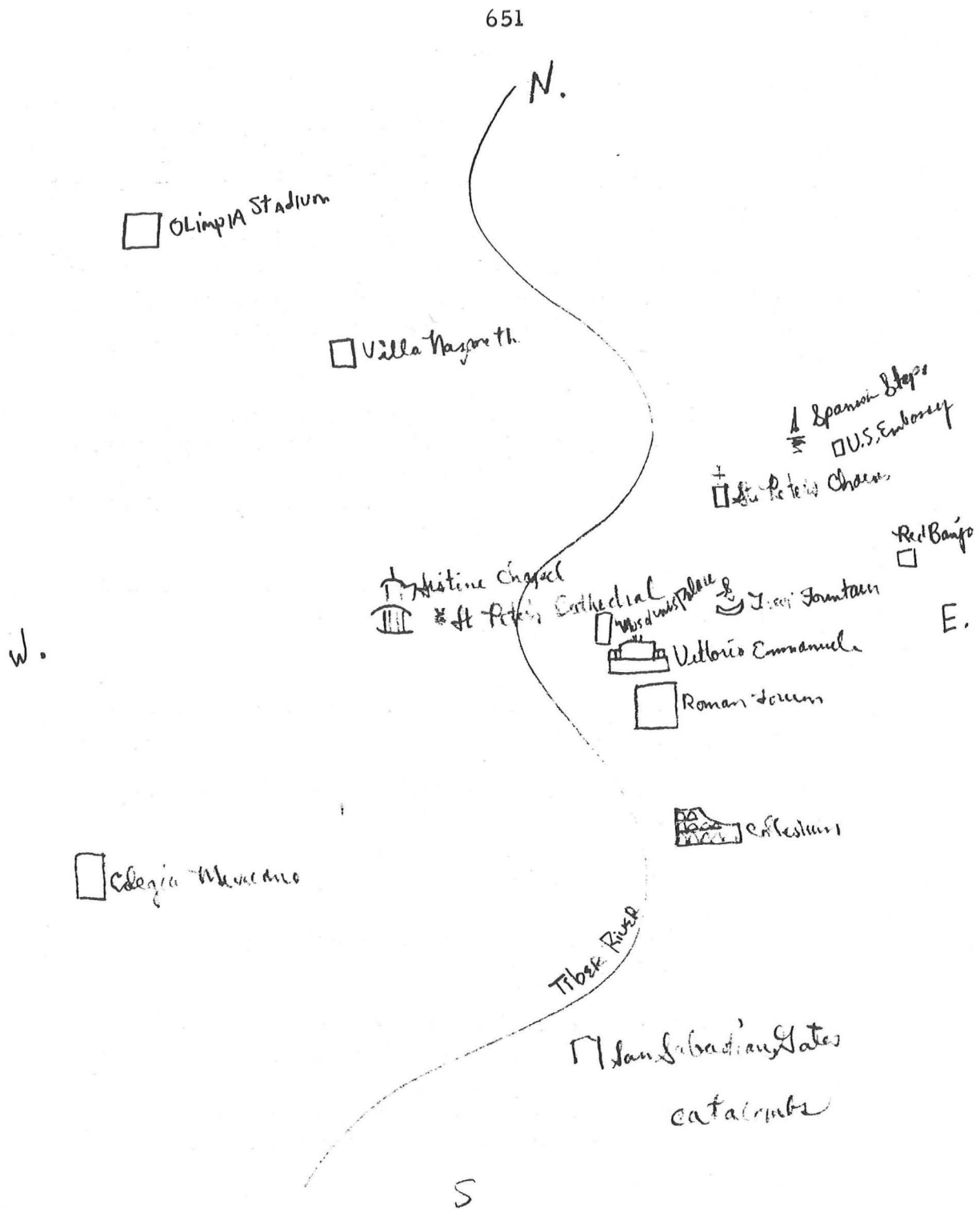


Figure 19.18 Bob Watson's Remembered Map of Rome

Rome may be completely turned upside down. I don't know. I think I have a mental block against Rome. I could hardly find adjectives for it.

As for the bus seating charts - well. All I know for sure is that George Aiken sat on the aisle seat (to buffer the world from Flora?) and I sat with Vanessa, at least until Nyb and I got together (to collect the charts).

As evidence of Janine's "decline" I exhibit Figure 19.16, showing her overlay for Venice. It is the most remarkable overlay in our possession, characterized by a freedom and degree of relaxation in the use of the symbols not previously encountered. How do you think Janine felt about Venice?

The final figures (19.17 and 19.18) shown are Bob Watson's and David Abrams' of Rome. These can be compared with earlier examples of Rome maps for these two individuals.

To conclude on the basis of this whirl through an ongoing project may seem presumptuous, but anyhow:

- 1) Memory is fading but very slowly, and each exercise brings it all back.
- 2) Distance in time results in:
  - a) Loss in detail for some kids, tentatively identified as not Rangers.
  - b) Increase in connectivity and ease of creation for kids identified tentatively as Rangers.
- 3) The developmental tracks taken during the trip in regard to mapping strategies are continuing to be followed.
- 4) The trip is in fact continuing.

### III

To connect all this with the pre-departure maps would seem to be in order. This is not the case. The kids had never seen us when they

first received the materials announcing the trip and were awed by the title of Doctor assigned to Bob. Under these circumstances, the kids that did the exercises followed the rules of Environmental A to the letter. Thus, for instance, Erica Cruz gives us in pre-departure a totally connected map of Brooklyn. But she never connected anything up again. This same applies for most of the kids in pre-departure. Consequently, they do not shine through as individuals to the extent necessary to make predictions. Furthermore, they drew the predeparture maps not only of well-known environments—that is beside the point—but from the security of home. On the trip this security disappeared. As Bob pointed out so perfectly in the first chapter, we were basically dealing with four personalities, which may in fact bear strong internal relationships to home personalities, but whose connections are not well-known. There is no question that the materials gathered before departure bear strong resemblances to the subsequently gathered materials and that they enable us to flesh out the picture of mapping strategies and approaches and attitudes and values in general, but they do not comprise the necessary data from which to make predictions within the framework of the maps. Perhaps the analysis of other data would enable us to make these links.

But no such predictions will be essayed on the basis of the maps alone. In this connection it should be borne in mind that the primary (originally the only) role the pre-departure exercises were to play was educational. In this they succeeded brilliantly as the whole outcome has shown.