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Cover: Photograph of Dennis Eckart by Louis Milic.
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Dennis Eckart interviewed by Louis Milic

A FRESHMAN MEMBER LOOKS AT CONGRESS

Politicians are frequent figures in fiction, films, and television. They are always plotting, but they seldom seem to do any work. Since most of us are shamefully uninformed about what our legislators actually do in Washington or Columbus, the editors of The Gamut thought it would be useful to present our readers with a close-up of our government’s workings by talking to someone new enough in Congress to retain a fresh view of it. One of the editors, Louis Milic, arranged an interview with Dennis Eckart, who in 1980 was elected to his first term in Congress from the 22nd District of Ohio. It was understood that we were interested in the practical activities of Congress rather than in controversial current issues. The result is the following interview, taped on December 28, 1981, and edited to reduce the length and to excise repetition and irrelevance.

INTERVIEW

MILIC: If you can remember, what was the precise moment when you decided to go into politics?

ECKART: I was raised with politics at the dinner table. My dad has been a member of the Euclid City Council for eighteen or twenty years. I’ve been raised with the telephone ringing for people whose basements are flooded, garbage truck didn’t pick up the garbage can, school crossing-guards, stop lights, stop signs at intersections.

MILIC: You never considered any other career?

ECKART: I wouldn’t say that. I’m a lawyer by training, and I was an assistant county prosecutor for a year. But I always had a predisposition to public service. I think it’s very important. “Politics” in itself doesn’t have a bad connotation for me.

MILIC: So in order to realize this ambition you’ve just had to do what came naturally: get your father’s advice, and . . .

ECKART: I was active in, first of all, passing out literature for my father since I was no taller than this table. I remember once I was running to put the literature in the people’s doors, Sunday before the election — it was very dark, you know — and there was a small hedge and above the hedge was a wire. Well, I didn’t see the wire, and I’m running with my literature, and all of a sudden my uncle on the other side of the street sees me doing cartwheels in the air and my literature is going up all over the place. And that’s how I started.

“...You have to get on the street . . . You have to have a good gut instinct feeling.”

MILIC: So you know about politics from the absolute street level.

ECKART: That’s how I learned politics. Many people pursue political science degrees, but if you’re really going to understand politics — of course I’m able to say this because my degree is in political science — you have to get on the street and understand how it works and how programs affect people. You have to have
"The number of personal staff is limited by statute."

a good gut instinct feeling. It goes much past polling, which is a sophisticated way of what my father used to do by going to bowling alleys. In a bowling alley, you can talk to 500 people on a given night, and that's one of the trademarks of how I campaigned. I'd go and shake every hand in a bowling alley, and you'd be surprised, it's not maybe scientific but it certainly gives you a good feeling of what's on people's minds.

MILIC: It doesn't give you a feeling though of what's on the mind of non-bowlers.

ECKART: Nonbowlers. You're right. Your sample is somewhat limited.

MILIC: Well then, you must have gone to law school in part because it is sort of basic training, isn't it, for someone with a career in politics?

ECKART: No, I knew before I got into politics that I wanted to be a lawyer. I love trial work. I love preparing for trials and doing research. A logical extension of that is found in the writing of statutes. The background is very helpful in Congress, and it was very helpful to me in the state legislature.

MILIC: Well, I think probably a majority if not more of any legislature including the Congress are lawyers, wouldn't you say?

ECKART: You'd have to research that one. I'm sure a lot of them are, though we seem to have a broad cross-section of people in Congress, in terms of their professional backgrounds.

MILIC: When Lincoln arrived in Washington to become a Congressman in late 1847, he took a room in Mrs. Spriggs's boardinghouse, a place which doesn't exist any more, near the Capitol, and he attended to all his duties himself. Things have changed. It's true that his wife went home because she never saw him, and I'm not sure that has changed. But Congressmen today, even new ones, have a good deal of help, don't they? Could you tell us, in whatever detail you have available to you mentally, how many people you have on your staff here and in Washington, what each one does, and how you chose them? Who pays their salaries, and how does the staff compare to that of other Congressmen?

ECKART: There's been an evolution — if I could start from a broader perspective — in staff help for legislative bodies in general. Just ten years ago, members of the state legislature dictated all their mail from their desks on the floor. They didn't even have separate offices in the State House. When I went to the State House in 1975 it was the first year when individual members had their own little — they were really that — cubicles. Instead of a pool of secretaries, you had a shared-time secretary, so at least you were always working with one person. Of course, the State House has assumed greater responsibilities, and under Reagan's New Federalism I imagine they'll be assuming more. So you've seen staff sizes grow, and the demands have become greater upon the state legislators. The same has been true of the Congress.

The first thing you must know is that the number of personal staff is limited by statute, and the amount of what is called your clerk-hire funds is fixed. Statutorily you are allowed eighteen full-time people, and then a couple of part-time people, temporaries and the like.

MILIC: Can you put them anywhere you want to?

ECKART: Anywhere I want. If I wanted eighteen people in the home district and no one in Washington, I could do that. If I wanted 50-50, which is the way I have it, half of my staff here and about half in Washington, I can do that. Their salaries are paid out of the clerk-hire fund, provided to each member of Congress; it's exactly the same regardless of seniority.

MILIC: Really!

ECKART: I think it's $350,000. The salary levels also have limitations on them. I can pay no one less than a specified small amount, and no one more than a specified large amount, but within that range I have total discretion within my office to pay individuals as I see fit.
MILIC: They're not civil servants? They're not in the GS classification?

ECKART: They're not at any GS levels, they serve at the pleasure of the individual member of Congress, and their salaries and perquisites are subject to the member, paying them at whatever level he or she wants. Now traditionally, of course, administrative assistants are the chief aides and are in the upper salary range, clerk-typists are in the lower salary range, much as in any other business, but within those ranges it's entirely up to me. Most members have between 14 and 16 staff people.

My staff is divided along three main functions. First and foremost, answering the mail. This year has been a phenomenal year for mail; we've been averaging almost 2000 letters a week, and the letters range from "why did you vote" to "will you vote," "please send me," "please explain to me," "will you tell me?" It is unbelievable the contact you get from people. Some of it is very detailed, handwritten, some of it is form-letters, postcards, but the mail comes in. Through July of this year, the Congress as a whole had received as much mail as in the entire previous year. So, the mail is very heavy, and I think some of that is from the major issues we've had before us, such as budget, social security, and tax cuts.

As I said, however, before I digressed on that, about a third of my staff is responsible for responding to the mail and, lest anybody think we don't read our mail, I spend between an hour and ten minutes to an hour and 40 minutes each day going through all the mail that comes in. It's one thing at the end of the week to get a summary of what 180 people wrote you about social security, and 50 wrote you about defense and 90 about taxes, but what you don't get from that is the flavor of it. I look at all the mail, and it's the closest form of contact with the people that members of Congress have. Now, all members of Congress do not read their mail. But, for every person of that ilk I'll show you another person who just handles all their mail themselves.

The second function we have is casework, and I cannot overestimate the huge value that people place on that. Now when a person's social security check gets ripped off in the mail, they're not interested in your position on the solvency of the trust fund, they want their check. The rent and lights don't wait, they need their money. A veteran who's sick or hurt and needs to get into a V.A. hospital is not interested in your position on the Defense Department budget, that person needs help now. So our casework consumes about a third of my staff time.

MILIC: That's the sort of thing that used to come in, in old-time big-city politics, at the precinct level. Do you get a lot of that by mail, or do people come to your offices?

ECKART: If I had to rank it, I'd say first is telephone, people call the district office; second is mail. The two are very close. Way down the line is the personal visit. You get a lot of people who have serious problems. For all the Congressional offices, casework is up this year. I think part of it is the economy, and people are concerned.

So handling the mail occupies a third of the staff, and the constituent casework is another third; and the other third covers the other activities, including — the largest portion — trying to deal with legislation, analyzing bills, and amendments, and following your committee-work, so that you can vote somewhat intelligently.

MILIC: That's the third part of your staff, but not the third part of your time.

ECKART: Yes, this discussion concerns my staff-allocation, not my time. And then the support things, the administration, the budgeting, the scheduling.

MILIC: Someone to make sure you get to places on time. Going back to the casework, you've mentioned veterans and social security. Are there other kinds of things?

ECKART: You name it and a Congressional office does it. I am amazed at that. From people — I'm not kidding you — asking you to get tickets for a Browns football game, for an Ohio State game, to Black Lung, student loans, every program that the federal government is involved with.
MILIC: How much of the time are you successful?

ECKART: First of all, you distinguish between the ones you can do something about and the ones that are just impossible. People ask you to endorse products and to tell people to do this and do that. And then a person will say “Look, I’m being audited by the Internal Revenue Service, please get the audit off.” There’s a standard ethics code for Congress and staff people, so we quickly tell people that you can’t get involved in legal matters, regulatory proceedings, or the like. But I do spend several hours each week doing constituent casework, in problems where my staff person couldn’t get anywhere. Sometimes the only way to get it done is for me to call personally.

MILIC: It’s a kind of ombudsman role in part, isn’t it? You open bureaucratic doors.

ECKART: It’s very important because you’re the court of last resort for some people. You’re right, it has shifted from years ago at the precinct level or ward heeler or city council member; it’s now shifted up to the Congressman. As times get a little tougher, people reach out a little more. So my staff and I spend a large amount of time doing this advocacy work.

MILIC: You know one of the things Lincoln had to do was to get patents for his constituents.

ECKART: Fortunately, they passed the Uniform Patent Law several years ago. But I can tell you I have brought passports back on the plane with me for people who have literally met me at Hopkins Airport as I was getting off the plane, and they were then getting on a plane to go.

MILIC: Marvelous. That’s faith.

ECKART: Casework runs the gamut, too. It’s not only individuals. Cities will call about grants, universities about education programs.

MILIC: Do you think that a Congressman who’s been there for ten terms is less likely to be running around so much?

ECKART: You would think that would be the case but, boy, you can’t prove it by me, yet. I’m amazed at some of the veterans of the Congress, how much they do do. You know, Tip O’Neill is home every weekend in his district. He does town hall meetings. Dan Rostenkowski, Chairman of the Ways and Means Committee, is home every weekend. He does town hall meetings. He has open office hours in Chicago. It’s the senior members who don’t pay attention to home who get in trouble. Al Ullman, former Chairman of Ways and Means, got in very serious trouble. John Brademas, the House Democratic Whip, who was defeated. As a senior member, Al didn’t go home that often, and got out of touch with his constituents. And I think that message has not been lost on the senior members.

MILIC: As a new congressman, what kind of training did you get right at the beginning? What did they do to get you started? They had to swear you in, I suppose.

ECKART: Six to eight years ago, there was no orientation for any member of Congress, if you can believe that. Then Harvard was the first to begin something. They initiated a program for incoming members of Congress, both parties, where they gave us an intensive four days and brought in guest lecturers from all over the United States, on a range of subjects.

MILIC: Where was it run, in Washington?

ECKART: No, it’s up at Harvard, at the J.F.K. School of Government. And it is intense: it starts at eight o’clock, and while you’re eating breakfast, they’re lecturing to you, and there are questions-and-answers, and group dynamics. Now, both of the caucuses, the Republican and Democratic Caucuses, also do orientation sessions. And philosophical groups have gotten together to do orientation sessions. I’m thinking of the Brookings Institute — which has a little more liberal leaning — and the Heritage Foundation, a more conservative group.
So my orientation process was three weeks long. And if you just think that six to eight years ago there was no orientation process. The new members got there. They were sworn into their caucuses in December, went through the election of the leadership and the like, and the next thing they knew is that they were taking their oath of office.

That is one of the rudest surprises I've ever had, that there's no book on how to be a Congressman. My office was physically two rooms that were divided; I had to arrange for the telephone to be hooked up. The member has to do everything, from filling out the paperwork... I don't know how they did it six to eight years ago. Of course, they may not have had a lot of the things that I had to do this time.

MILIC: They may not have had as much turnover.

ECKART: Yes, that is a very important point too. Because 54% of this Congress has served six years or less. It's the highest number of low-seniority people since the Congress was first created.

MILIC: There was much more of an expectation that a new member would take direction, at one time. That is, as the youngest member you'd be expected to take your direction from the chairman of the committee.

ECKART: That's Sam Rayburn's classic rule, "To get along, you go along." That view was rudely shaken in the last six to eight years, starting with the first Watergate election class, which was a large Democratic group, and now with the Reagan class, which is a large Republican group, we've had this huge influx of new people. They rewrote the rules. They now elect committee chairmen...

MILIC: Instead of seniority.

ECKART: Oh yes, heaven forbid, eight years ago, that you would consider that. The average age of the Congress, chronological age, has declined; in addition, the average of seniority has dropped off dramatically. So, yes, you're right, much less was expected; you were expected to be at your committee meetings, to form a quorum and to support the chair's position. That has changed a lot. Not enough for some people. As I'm fond of saying, seniority is something I'm against, until I get some of my own. You know, you want to be able to do more, you come to the Congress with greater expectations, but after a while, your day gets kind of long.

MILIC: I'll bet. Tell us about your day.

ECKART: My wife Sandy and son Eddy are with me, in Washington. We live in McLean and one morning a week I try to stay home to eat breakfast with my son. He's two years old. I try to get up with him and dress him. And then one night a week I try to be home early. But that one morning and one night aside, I try to be at the office about quarter to eight. My scheduled day usually starts about eight-fifteen, eight-thirty.

MILIC: You mean that's when people come in.

ECKART: Or committee meetings, or places to be. Occasionally there are breakfast meetings. The floor sessions start on Tuesday and Wednesday at noon, and on Thursday and Fridays at ten, and sometimes Mondays. And then it goes straight through, so you eat lunch on the fly. Your committees are subject to the call of the chair, which means that when we were doing the Education and Labor Committee budget this year, which was just huge, we met straight through, four days in a row. Committees conflict. Fortunately for me, all my committees meet in the same building.

So you have your committees, you have floor sessions, you have your constituents, you have the hour and ten, hour and fifteen, that I try to set aside for looking at the mail every day, returning phone calls, people who come in — you have to attend to your staff, staff meetings, decisions on whether you are going to support or co-sponsor certain issues, plus all the administrative tasks of running an office, conflict resolution...
MILIC: You mean among the members of your staff?

ECKART: Yes. Then I have my legislative matters, then I have to go to another committee, maybe testify, line up co-sponsors. . . I'm home on the average, it's worked out, I've been keeping a little diary, about 8:15-8:30, every night, so I'm at the office about twelve hours. My staff also puts a packet together for me— it's called a floor packet— that's all the important issues, letters, anything like that that I'm going to have to deal with the next day.

MILIC: So you take that home?

ECKART: So I take that home with me.

MILIC: Instead of going to a movie.

ECKART: Don't get to watch much TV or see many movies. I try to watch Nightline. And I read six newspapers a day.

MILIC: Which ones?

ECKART: Well I get the Press, the Plain Dealer, the Beacon Journal and the News Herald, which are the dailies that circulate in my district. Then I read the Sun paper every week. And then the Washington Post, the New York Times and the Wall Street Journal.

MILIC: You actually read them yourself or have someone mark things for you.

ECKART: Depending on what the paper is. I will read the Press, the Plain Dealer and the Post. I'll take the whole newspaper, but once you read one of them then you'll see similar stories in the others. So what you're looking for is what's in one newspaper that's not in the other. And then of course we will get dozens of magazines as I see you do. And I'll grab a couple of those and look through them.

MILIC: So you're in your office about half the time would you say?

ECKART: No. That's the nutcracker on that question. Just about two weeks ago, I had a 7:45 breakfast meeting with twenty other members. We were going to talk about strategy on an amendment we were offering on the floor. We put all this time in and then the amendment got adopted by voice vote without objection. My point is that I was at the Capitol at quarter to eight— I was at the breakfast meeting and I never got into my office until after two-thirty, because I went from the meeting to the floor to vote, from the floor to a committee meeting. We had a series of roll-calls that day and I had to keep running back and forth. I had lunch in the Capitol with some constituents who were down to visit me, then I went from there over to follow a committee hearing, and I just had staff running things over to me all day.

MILIC: But that was an unusual day?

ECKART: Yes, but not terribly so. I would say half [my time in the office] is high. If I'm going to be on the floor because it's a bill that I have interest in, or I'm going to be speaking, [it will be] for three or four hours. You see when you're going to be speaking on the floor— which is, you know, not very often — you don't know when you're going to speak. They'll tell you this bill's coming up at two o'clock; it may get postponed, it may get up early and it may have a long list of speakers; you wait until it's your turn to speak because they go through the bill title by title and they may not have any amendments to this title and all of sudden someone may pop up with a real controversial amendment so that the debate can carry on for hours.

MILIC: Are you scheduled to speak? Do you put your name in and say . . .

ECKART: You can. When there's a specific bill coming up and you have a specific amendment and there's a narrow issue that you want to talk about, you go to the person that controls the time — either the committee chair or the subcommittee chair, the sponsor of the bill on the majority or minority side, and say how much time do you have? Now under the rules they are given so much time. And you can say "Can I have X number of minutes?" And under strict Congressional
courtesy, even if the person is opposed to your amendment they still have to give it to you and they do so. You may want ten minutes and they may have an hour and have twenty speakers who want time, so you have to settle for less or get other people to take time and then yield it to you.

MILIC: Is there a little log-rolling there? Does it help to be on good terms with the person who controls the time?

ECKART: No, no. It is considered a grievous breach of courtesy that's developed over 200 years not to give someone time. If I'm controlling time on a bill as the floor manager, let's say, and I'm adamantly opposed to your amendment I will give you your five minutes and then I'll take five minutes to oppose you. Yes, not to give time is considered very bad form.

MILIC: That's comforting.

ECKART: It allows a thorough airing and nobody can object. The rule may come out allowing only one hour of debate and there could be thirty amendments. So that then people will try to defeat the rules or try to ask unanimous consent for more time. No one's ever happy with how much time they get.

MILIC: Right. But there are thousands of bills every year?

ECKART: Yes. We won't get but a couple of hundred to the floor.

MILIC: I see. The others die in committee . . .

ECKART: It's not unusual for forty or fifty members of Congress to introduce similar bills on the same subject, and each is numbered separately. But they try to get a number of ideas that are generically similar in a single package and take it to the floor — for example the water control act, which will include a whole bunch of different ideas dealing with water pollution . . . The committee's responsible for putting that all together and that will kind of determine how much time too.

MILIC: That makes sense. How much time do you allow for lobbyists? And I suppose they see you in your office, not in the lobby, as used to be the case.

ECKART: There was more lobbyist attention on individual members at the Statehouse in Columbus than in Washington. Now there's probably some very valid reasons for that: I'm a freshman; I'm not a committee chair or subcommittee chair, and jurisdiction is a very important issue in the Congress. So the defense contractors deal only with the Armed Services Committee. They don't go around and talk to the other 400 members. People dealing with health issues are very much concerned with Henry Waxman's subcommittee on Health and Environment. They don't run around to all the other members of Congress. So first of all things are very well targeted. It's very unusual for a committee to be overturned on the floor, though it's happening more now than ever before.

MILIC: So if they can get the committee's support, they feel pretty confident.

ECKART: If they can get the committee's support, it will be left then to a letter to the other members stating "here's our position, we'll appreciate your consideration." I asked my scheduler for a count of lobbyists (I assume you're talking about paid representatives of a narrow interest group not a constituent): it's less than 5 percent of my visits, amazingly low. Now talking to senior members, you know, I understand that that changes radically. Dan Rostenkowski, chairman of the Ways and Means Committee, says he goes in the back door to his office because there are 20 people sitting out there to talk to him almost every hour of the day. So if you talked to Dan about lobbyists, he'd give you a different story.

MILIC: Well, lobbyists have a bad name, but I suppose they serve a function, or at least they did at one time, when communications were different. Nowadays we think of lobbyists as people who are attempting to exchange money for votes on a bill.

ECKART: You get to one of my sore spots. One of the most serious undermining problems in the political process is the way elections are financed. We ought
to have public financing of elections, so then no one is giving any money to anyone who is running for any Congressional office. That would take the element of personal wealth out of the election process as well as clean up any hint of influence that would exist with donations to campaigns. I think that Jack Anderson and others, whether you like or dislike the columns that they write, are fairly well documented, that many times there's a high degree of coincidence between money donated to campaigns and co-sponsorship of bills.

MILIC: Common Cause has shown that people who nominally support public financing often vote against it or water down the bills.

ECKART: I'll co-sponsor a public financing bill in this next session. That will be one of the things I'll get ready to introduce. I just think it's got to be there: money is an inordinate influence on the process.

Back to lobbyists — another important point is that there are interest groups that are lobbyists, such as — you mentioned Common Cause — Congress Watch, Ralph Nader, environmental groups, who have learned that there are other ways to lobby: petitions, going to the streets, grass roots; you know, the million signatures were collected against James Watt, Secretary of the Interior, the largest petition drive ever in the history of the country.

MILIC: It's bound to have made an impression.

ECKART: Done by a lobbying group, a grassroots lobbying group, and what are they going to do? They're going to watch me and say "Here's how Eckart voted on these key environmental issues this year." Nowadays with various interest groups watching, you see the members being more careful of their votes and their conduct.

MILIC: So you're always going to have pressure of one kind or another. Now you mentioned earlier that you take letters seriously. I suppose you look at polls. Do you subsidize polls of any kind?

ECKART: Well, first of all, polling has come a long way, but it's not the be-all and end-all that some people want to think it is. It sometimes only confirms suspicions. It's just one more tool for a public official to find out public sentiment, with as close to accuracy as you can get. Yes, polling can be helpful, I just... I am a bit leery of polling — if you feel me hedging a little, it's because I see some people in public life who won't answer "how are you?" till they go check their pollster. Some people can influence public opinion, some people try to manage public opinion and other people are totally run by public opinion. I think you have to have some native instinct, some gut feeling and common sense, to accompany what is the public sentiment and you don't get that with a sterile poll. In some instances people aren't familiar with the more esoteric issues. So it's a combination of gut feeling, your own knowledge, your own background, your own education, and your own conscience, scruples that you have about certain issues, how they affect the people of your district and how they affect the country at large. I like to put it that it's your constituents, your country and your conscience. And sometimes boy they don't always match up!

MILIC: A lot of the time!

ECKART: A good example is the oil votes. I'm voting against the oil companies all the time and the people from the oil districts say "Look, I know you feel you're getting ripped off, but if I vote against oil in my district I'll be defeated." Well there's a classic example: he or she knows what's good for the country, but for their district they just can't vote against oil, that happens frequently.

MILIC: Now you mentioned public financing. This is something on which you want to originate a bill and I can see why you feel that way but there must be other things that come up. How does it happen that you decide you want to originate a bill and then what do you do once you have the idea?

ECKART: There are three most frequent ways of deciding to originate legislation. Number 1, constituent inquiry: "I've got this problem, I'm a builder... I'm
unemployed...small business is getting killed...my hospital bill"—can't we do something? And you start thinking, yeah, hospitals bills are high, cost containment is a good idea, and then you call a staffer in and say, "Would you see what's going on?" And they bring you back the bills that have been introduced, the committee reports. And the second way is believe it or not from the media, highlighting problems. When I was in the state legislature, the investigative teams of the various newspapers or the major radio or television stations would discover an "abuse" and a bill would be introduced to close a loophole in the law. And then of course a third element is that you're involved in certain issues that you think are important. If you really feel strongly about energy, well you're going to introduce a bill to solve the energy problem. You use your educational background or maybe your business background. You're a doctor and you're convinced you've got the way to cure rising health care costs, so you run for Congress and you get on the health cost subcommittee and that's all you work on. That's a professional interest. So...there's really three ways.

MILIC: Right. Once you've decided, you don't want to spend a lot of time putting your name on a bill that won't get anywhere. You must do something in order to get it...

ECKART: You get it drafted, you then circulate it among other members, among staff people...

MILIC: People who are interested in that topic?

ECKART: Yes, academic community, business community, labor community—you circulate it all around. Everybody gets some feedback on it and you introduce the bill. Then the hardest thing to do is to get hearings on it, and get the Congress to devote some attention to it. You have to allocate very scarce staff time to that. A number of members will introduce a bill to get publicity and then not follow up: they say, I've introduced this bill...

MILIC: It's good campaign material.

ECKART: It is, but I'll probably introduce less than a half a dozen bills this year, myself. I will co-sponsor a lot of bills because if somebody else's bill says what I want to say, makes my policy position clear, I will co-sponsor a bill. But if I sponsor a bill of my own, I view that as making a commitment to move it and get hearings and bring all the affected parties together. It's not easy to do.

MILIC: Do you yourself talk to the other members or the chairmen, or sub-chairmen?

ECKART: It's the only way to do it. You can't have staff call staff. If I want you to co-sponsor my bill, I have to call you personally. First of all I'm guaranteed that I'll talk to you: members always return calls, no matter how senior or important; second, I'll look for geographic balance; third, I'll look for philosophical balance, and I'll look for party affiliation balance, so that I've gotten as broad a range of support as I possibly can. Sometimes you can't get that but that's what you try to do.

MILIC: So it's not just sitting in your office with a pencil and paper and writing out the bill that will go to the floor?

ECKART: No, we have what is called legislative counsel. They work for both Republicans and Democrats. They actually do the physical bill-drafting. When I was in the state legislature, I set a rule for myself which I still follow to this day, I don't have people privately write bills for me. You never know what's in them. I'll deal with the public draftsman.

MILIC: Who is the legislative counsel an employee of?

ECKART: He's an employee of the Congress at large; I could walk out of his office and a Republican could walk in. They operate in the strictest confidence.

MILIC: What is your perception of shifting affiliations within the Congress—the parties, the regional interests?
DENNIS ECKART WITH LOUIS MILIC

ECKART: I find labels in Congress are becoming a bit blurred. People are less prone to be quickly painted conservative, liberal. We have our “boll weevil” Southern Democrat, who more often than not this year voted with Reagan, but who don’t dare run as Republicans in their districts because the Republicans just don’t win in their Southern districts. And we now have the “gypsy moths” in the Republican party, the Northeast and Midwest Republicans who are very concerned about the huge shift to the right in the Republican party and they’re always straining and stressing under the internal conflicts there. So philosophically things are changing plus I think there is more of a breakdown along geographic lines. You’re going to see more references to Sunbelt and Snowbelt positions. I think that’s an emerging political trend. You see very few of the real ideologues on either side any more, on either philosophical wing. People are trying to be a bit more centrist.

MILIC: To be sure, though along with Democratic and Republican there always have been liberal wings both in Democratic and Republican camps and conservative in both too . . . . Now, how do you get assigned to a committee?

ECKART: You don’t get assigned to committees. Both Republican and Democratic caucuses have a Committee on Committees and you have to get elected by your caucus to the Committee. So the first thing you do after you finish campaigning here is to go to Washington and start campaigning again, to get on the committees. In many instances it’s very competitive because there might be only two or three seats open and there’s eight or nine people who want to get on the committee. So the Committee votes and you have to get a majority of the Committee on Committees to place you on certain committees.

MILIC: And who are the people on the Committee on Committees?

ECKART: They are elected by the caucus, by geographic region, by leadership and by the various caucuses.

MILIC: So in a sense being elected by the Committee on Committees is an endorsement of a certain kind.

ECKART: Yes, but you can still be overturned by the whole caucus, but that seldom if ever happens. It’s called Steering and Policy on the Democratic side and Committee on Committees on the Republican side — if it recommends you you’re probably going to serve. You don’t always get what you want, but I was fortunate to put together some good balance in my assignments.

MILIC: I’m especially interested in your being on the Education and Labor Committee.

ECKART: I’m on that committee by choice and let me just back up and give you my ideas on it. Education in this country has been the ladder, if I can use that example, by which each generation has been able to climb up a little bit higher, a little bit better, and I think you have to have access to all people for education, not just certain income levels or certain groups. My subcommittee, post-secondary ed, has the programs: student loans and grants which affect the kind of education millions of Americans will have. Of the 35 billion the Congress cut out of the President’s budgetary request, Education and Labor had 12.2 billion of it. So we had one of the toughest jobs to do while still trying to preserve programs, particularly for middle-income America. If we get into the position in this country where education is only for the wealthy, then we have a very, very serious problem. You know what the tuition and fees are here.

MILIC: Yes, Ohio is in pretty bad shape as far as that’s concerned. It subsidizes higher education — it’s among the bottom five states, I think.

ECKART: That’s where we usually are, yes.

MILIC: What can you do about it in Congress?

ECKART: We have to really work to preserve the Federal programs that give middle-income people an opportunity of getting an education. Terrell Bell, the
Secretary of Education, is one of the decent people in the Reagan administration. He knows what I've said is true, but he's dealing with people from a different philosophical bent in the Administration — cut-cut-cut, no matter what the costs are and it's very short-sighted to do that.

I don't think anybody disputes that there was room to trim the federal budget. I just think it should be done reasonably and fairly. You didn't see tobacco subsidies being cut, or Western river water projects, yet we see our sewer treatment grants cut here, and student loans, school lunches cut back, for both rural and city students. The same administration that found all sorts of waste, fraud and abuse in other areas of government couldn't find one or two percent of it in the Department of Defense. Access to higher education is critical, if we're going to produce a generation of folks who can run all the neat little things we're making.

MILIC: Do you think that higher education should change much, from what's being done now, should move more in a vocational or practical direction?

ECKART: We cannot produce all Ph.D.'s, and we cannot produce all tool-and-die makers. Particularly our economy here in the Northeast has to become more diversified, has to become more interested in things like med tech and electrical engineering. Our voc-ed programs ought to be reflecting a little more diversification, as well as providing what I like to refer to as "street skills."

MILIC: As a humanist myself, I don't disapprove of all this emphasis on the practical, but I have a feeling that a man or woman who is trained to do something very practical, of the sort you have been describing, still needs something to nourish the spirit.

ECKART: I don't dispute that. I just want to emphasize that the two probably go hand-in-hand.

MILIC: Right. (pause) I'm interested in political rhetoric; it's one of my enthusiasms. I've done studies of some of our well-known Presidents, who were either good or bad speakers, and it's quite fascinating, partly because so much of that sort of thing is done by speech-writers. Now, how important would you say it is for a Congressman to be a good speaker? How many minds can you change, when you get up on the floor?

ECKART: It all depends where you're giving the speech. On the floor of the House, there are some issues that are fairly well-determined before the debate even begins. So much publicity, so much attention, so much pressure has already been generated that a floor speech is not going to sway you. But those are few and far between. Most of the time, you're sitting on the floor, or watching it in your office on closed-circuit TV, and someone will stand up and start to go through a point-by-point analysis of the bill or the amendment, on how it relates to this philosophical underpinning, which you had a little kinship with. And all of a sudden you're saying, "yeah, boy, he made a really good point. Which really struck home there," and then, you know, it piques your curiosity. Another important point is who is giving the speech? Is this a well-respected committee chairman who really knows this and can articulate that viewpoint very well? As opposed to somebody who mumbles and stumbles his way through it? On the predetermined votes, speeches make very little difference. On the ones where there's no pressure, not a whole lot of attention, very little mail, no public opinion samples, maybe neutral on your district, a good speech that's well thought out can be helpful to you. Now when you're in the home district, that's entirely something else.

MILIC: Yes.

ECKART: You have to be able to convey your thoughts to your constituency. It's the one and only chance you have to personally tell them why you feel the way you do. And it is, I think, of paramount importance to try to be cogent, articulate, and as straightforward as possible in the district, because you can and will influence people every time you give a speech.
"There's nothing worse than getting up there and not knowing what you're talking about."

ECKART: I'm a bit unusual. My office tells me I'm terrible to work for because people can't write for me, and that's absolutely true. I have a great deal of trouble with people writing things for me. My staff will give me a draft, and I'll use it as a point of origination, and from that I'll prepare written remarks. If it's a short, one-minute speech, or a two-minute speech, on an amendment or on a certain subject, I'll just generally write down my own ideas or ask the staff, "Give me seven or eight ideas to talk about this subject." And then I'll weave them in together. Some members, no matter what they speak on the floor, it's all written and prepared for them. And they feel most comfortable doing that. If you gave me a speech to read, no matter if Theodore White wrote it, I would deviate from it.

"When someone throws mud at you, don't try to wipe it off, all that will do is smear it."

MILIC: I see. How do you go about it? When you talk before the House — I don't know how much you've done that — or in a committee, I assume you talk from notes or impromptu.

ECKART: I'm a bit unusual. My office tells me I'm terrible to work for because people can't write for me, and that's absolutely true. I have a great deal of trouble with people writing things for me. My staff will give me a draft, and I'll use it as a point of origination, and from that I'll prepare written remarks. If it's a short, one-minute speech, or a two-minute speech, on an amendment or on a certain subject, I'll just generally write down my own ideas or ask the staff, "Give me seven or eight ideas to talk about this subject." And then I'll weave them in together. Some members, no matter what they speak on the floor, it's all written and prepared for them. And they feel most comfortable doing that. If you gave me a speech to read, no matter if Theodore White wrote it, I would deviate from it.

MILIC: OK, that's good.

ECKART: How often do I speak? Speaking on the floor, like a welcome, is something that can very quickly be worn out, if done too frequently. And therefore I choose when to speak on the floor, either because it's an issue that is important to the district or to Cleveland, or because it's one of particular interest to me or on which I feel I have some expertise. There's nothing worse than getting up there and not knowing what you're talking about, number one; and, number two, getting up there on every issue. Pretty soon you lose credibility.

MILIC: I'm glad to hear that you consider speaking an important skill. I heard you talk, at the City Club. I think this was before the election; there was one man in particular, whose name I can't remember now, who was extremely aggressive toward you. And I remember that you made it a point, I guess, I don't think it comes natural to anybody, to keep addressing the issue and to avoid the personality. I gather that's your procedure.

ECKART: Yes, I try to avoid confusion between issues and personalities, first because I think the issues are more important; and secondly, today's enemy may be tomorrow's ally. And I don't see any reason to confuse the two. In the short term, somebody may tell you, "Gee, he didn't answer that question or that charge." But I have learned in my short life that there are a lot of charges that will be thrown your way, and some of them may best not be answered. John L. Lewis said, "When someone throws mud at you, don't try to wipe it off, all that will do is smear it. Just let it dry, and it will fall off of its own weight."

MILIC: That's good politics, I think. As you say, you may need that enemy as an ally, especially if there is a group of you who are interested in something in common, and represent not only your district but the region. So, I was meaning to ask you, how much cooperation is there, how much interaction is there, among the members from the various districts of, let's say, this group of counties here?

ECKART: On issues of common impact and importance to our community, there is a great deal of cooperation.

MILIC: Regardless of party.

ECKART: Yes, I'm very pleased about that. And I say that without reservation. I would like more regular meetings, where we can sit down and talk. But our schedules aren't always conducive to it. Certainly there's room for improvement.

MILIC: Is there a group, a caucus for the region?

ECKART: Well, the four of us, from the Cleveland area, will get together. And then there's the Ohio group, which does meet regularly, and takes up issues that are significant to Ohio. There's room to improve, but compared with some state delegations or city-area delegations, we do pretty well. There are others who do
A FRESHMAN MEMBER LOOKS AT CONGRESS

much better —

MILIC: You mean, like the tobacco states.

ECKART: Yes.

MILIC: I notice that your letterhead mentions the fact that you were elected freshman Democratic Whip. What does that mean? What are your duties?

ECKART: Well, they have to elect you, so that was another campaign that I had to run. The whips’ organization is the same in both caucuses of the House. It’s a conduit, it’s an information gathering and disseminating opportunity. The whips meet every Thursday, to discuss what they’re going to do for the following week. They’ll say, “Here’s a bill that’s coming up, and we’re thinking of running these amendments. Would you please check with your people and let us know.” And I’ll call my freshmen and say, “Here’s the amendments that we’re going to offer, and what do you think?” And then I report back and say, “Well, amendment one looks OK, and nobody objected. Amendment two looks all right. Amendment three nobody likes.” So it’s a feedback. It also works the other way, that is, freshman members will come to me and say, “I’d like to do something, offer an amendment,” or whatever it is, and I go to the leadership, to the committee chair, to the person, and say, “Here’s what we’d like to do. Can you help me?” So I’m a contact point. When you’re dealing with four hundred thirty-five people, there has to be some sort of semblance of order.

MILIC: How many freshmen are there? In your group?

ECKART: Twenty-eight.

MILIC: That you’re responsible for whipping into line?

ECKART: Well, that’s the other side of the job. When the parties take positions, then the respective whips are responsible both for communicating the party position, and for persuading the members of the caucus to support the party position.

MILIC: You don’t have any choice then, do you? As a junior member of the leadership, you’re committed to the party position.

ECKART: No, you can buy off if you do so very early. I have heard our own whips say, “Look, I can’t vote for that amendment.” Now there are very few things that become party positions. There may be a majority of the Republicans taking a position, and a majority of the Democrats taking a position, but if it’s not a party position, you’re still a free agent. No, you’re not locked in. It’s not like it was, yesteryear, when, if Sam Rayburn said it, that’s the way it was. One of the things that impresses me is the collegiality of decision-making. If anything, I think the Democrats are too fractionalized from time to time; they’re too slow to respond to some issues, and they have to run it by 63 people, it seems, which means that things get derailed, delayed, and detoured. But that’s Congress for you.

The other thing that I like about the job is the opportunity to be a floor whip. Of the 28 whips, which is the total organization, they’ll ask 4 or 5 people to be the floor whips and actually work the floor on a given issue. And I volunteered to do that on our two budget resolutions. And what was great about that was that I got to go in to the most senior members, and the junior members, and got a chance to meet them all personally. This was a great opportunity to meet my colleagues.

MILIC: You can’t be effective if nobody knows you. And if no one takes you seriously.

ECKART: Being taken seriously . . . credible. You accomplish that one-on-one. You have to spend time doing it, it doesn’t just happen.

MILIC: The Constitution requires you to run for office rather frequently.

ECKART: Two years.

MILIC: In effect, you are running for that next election all the time, aren’t you?
ECKART: It's something members are torn between. One member told me kid-
dingly that he would settle for one twenty-year term. I said, "The way things have
been going, with Watergate and Abscam, other members have been getting
twenty years, lately." But certainly a six-year term for a U.S. Senator is looked at
with a great deal of envy.

MILIC: I'm sure.

ECKART: On the other hand, if you read the Federalist Papers and the discus-
sions about our Constitution, two hundred years ago, the House is supposed to
be the people's body, the one most directly responsible to the current mood of the
people of the country. And the Senate is supposed to be the ethereal body. . .

MILIC: In fact, they were not even popularly elected.

ECKART: That's right, they were not popularly elected. And so if you want to
be consistent with what the founding drafters of our Constitution thought, you
have to have recurrent elections.

MILIC: So you are forced to campaign and by so doing, you are forced to stay in
touch with your people.

ECKART: Now we get into what was my most serious criticism of the process —
the emphasis on money, which is now all-consuming. You don't have to stay in
touch with people when all you do is spend $250,000 on television — that's your
whole campaign.

MILIC: Would you say that either controlling or even abolishing television ads
for elections would be a decent idea?

ECKART: No, I still say it's the influence of money. Let all the people who want
to have access to the public . . . be able to have that access . . . and make it equal
access.

MILIC: Look at what happens with some of the issues, like the two that were on
the last state ballot, that could really, one of them at least, have been in the public
interest.

ECKART: Interestingly enough, though, the one that was spent a million dol-
ars on, was defeated. The public sometimes sees right through all that and gets
frightened when they see that much money. But the skilled manipulators of the
media do have an inordinate influence in the electoral process.

MILIC: So it seems to me. Let's go back a little bit, to your colleagues in the
House. Whom do you admire in the House, would you say? Should I say, whom
do you most admire?

ECKART: There are several people in the house who I think do a superb job, for
different reasons. First is a committee chairman, of Education and Labor, Carl
Perkins. I admire him because he has been in the Congress thirty-some years. If
there was one person who could easily have said to me, the newest of the fresh-
men on his committee, "Be quiet," he could have. But absolutely not. Totally
open, totally accessible in the whole deliberative process over those twelve billion
dollars of budget cuts. Carl would say, "What do you think?" in that Kentucky
accent of his. It shattered any feeling I had about just being run over by seniority.
He knows these programs ice-cold. And yet whenever I had an idea or a sugges-
tion, he wouldn't just pooh-pooh it. He brought me into the process and educated
me, and I really have to admire that.

Paul Simon, from Illinois, is a little more conservative, but he's very much
into education issues. We have a couple of very capable people. Leon Pinetta is a
younger guy, he's in his late thirties, and he chairs our Reconciliation Task Force,
which is responsible for that whole budget cutting reconciliation process. A beau-
tiful job. Among the Republicans, right here in Ohio we have a very underrated
member: Ralph Regula, who's second-ranking Republican on the committee,
knows his homework; and when he stands up on the floor, you know he knows
what he's talking about.
MILIC: Let’s move to something more mundane. Do you have any social life in Washington?

ECKART: My family is there by choice and consequently I don’t go on the party circuit.

MILIC: But there is a good deal of that, isn’t there?

ECKART: I have two or three receptions every night that I could go to.

MILIC: Not everyone resists temptation, would you say?

ECKART: No, I don’t condemn anybody who does, if that’s what they choose to do; that’s not my style.

MILIC: You said you live in a house in — what is it — McLean?

ECKART: We rent a townhouse. It’s in McLean. It’s — when there’s no traffic — an eighteen-minute drive in; when there’s traffic, it’s a forty-minute drive. It’s a little townhouse that would sell for $50,000 here in the district. It sells for $139,000 or something like that in the Washington area. Housing is just astronomical.

MILIC: Having your wife and son in Washington gives you more a normal home life, in a very abnormal situation.

ECKART: That’s right, because you are dislocated so much.

MILIC: So you don’t really mind living in Washington.

ECKART: No. But it’s crowded; it’s hot in the summertime. When there’s the slightest bit of snowfall, the city just closes down.

MILIC: It’s a little bit dangerous down there, isn’t it, judging from what happened to one of your people?

ECKART: Well, that’s a tragic occurrence, literally the saddest thing that happened to me this year. As you know, Paul [Komlosi] was shot in an abduction of some sort outside his home, in the Hill area, near Washington. And crime is a problem in parts of D.C.

MILIC: Isn’t it a shame that it should be there, of all places?

ECKART: It’s a shame that it’s a twenty-five year old, former Notre Dame athlete, who looks to a life in a wheelchair now. But Paul is a very dedicated young man and will be back to work doing a good job.

MILIC: Is there anything else you regret during the past year?

ECKART: Yeah, I wish we answered our mail one day sooner, or answered our phone calls an hour earlier.

MILIC: Those are little things. Anything bigger?

ECKART: I think that, you know, the acts that I regret were the acts of some of my colleagues selling their votes for sugar price supports, or for oil concessions for the tax bill. We’re talking about some of the most major, fundamental changes in the priorities of the federal government since Roosevelt. And these folks selling out for . . .

MILIC: Cuff-links.

ECKART: Yeah, cuff-links, thank you. And I very much regret that. And the day when two people who had committed to me to support a certain item; and they were then told by the White House that they weren’t going to get any election opposition if they voted this way, and they had to go that way. I was just furious because I couldn’t conceive how a person could do that. I perfectly understand that politics is the art of the possible and compromise. And I understand that sort of thing goes on every day, be it here in City Hall in Cleveland or in Washington. However, I just can’t fathom people bargaining their votes on such
No matter what your job title is, you’re still a father, or a brother, or a son, an uncle, a husband. You have to make time to do that, and I wish I could have done a little more of wearing those other hats. That would be my regrets, or omissions. Compromises? You always think you could have worked something out a little better if you had another day or another hour.

MILIC: Could have gotten a better deal.

ECKART: Yeah. I was on the Education Committee Budget Conference, and I held out for tough rules on the student loan program. It came down to Larry Denardus, a Republican from Connecticut, and myself. And we were the only two holding out. And the pressure was put on both of us. You see, they needed both of our signatures. And...

MILIC: It was a reconciliation issue?

ECKART: Yes, it was a reconciliation of the budget bills to be accomplished. I was the only freshman Democrat on the conference. And Larry and I stood tough for about three hours, and the committee chairman said, “We’ve got to have this,” and everybody was beating up on us. So we got the committee chairman, the ranking Republican, and Terrell Bell, Secretary of Education, to sign off on a letter saying that they would write our ideas into the Department of Education rules. “Here’s what we want.” Well, I’ll be a son of a gun — Two months later they reneged. Yeah, you’re right, I could have hung on a little longer there, maybe I would have felt a little better.

MILIC: Is there any way to make Congress more efficient? I don’t mean the Democratic or the Republican side, but something to improve, let us say, the relationship between the executive and the legislative, and to make the whole system a little more effective.

ECKART: Oh, there’s lots of reforms: we could reduce the number and size of our committees and subcommittees, reduce the size of our committee staff, to make more efficient use of our time. I think we ought to have sunset legislation. I think if the Congress has had a major failing in the last twenty years, it is that they’ve created programs and walked away from them, never looked back at them again.

MILIC: Agencies that have been established...

ECKART: Agencies, programs, yeah, and we don’t just go and see why they’re not doing what we said they were to do. It’s been a major failing, and I think the Democrats in Congress wear the jacket for that.

MILIC: What would be a kind of sunset system? That is, would it say, in the legislation establishing a new program, that it dies in five years unless...

ECKART: Unless certain things happen, and establish a procedure and process by which we do that. As for our relation to the President, anything fundamental there would really go to the heart of our system, and I don’t know how you’d deal with that. The balance? Well, there were stories being written about the imperial Presidency of Richard Nixon, and of course Lyndon Johnson took it to its farthest extreme, and we now see Ronald Reagan exercising great influence over the Congress, through political muscle, coming after a very weak, almost anemic President, Carter. The Presidency is a real function of the individual’s personality; it has some inherent powers; it has certain limitations, and the Congress can rein those powers in or remove those limitations from time to time. It seems to have worked for some time, and I’m not ready to bring the whole house down. Even an
ineffective, inarticulate President commands national media. And if you know how to use that, you’re going to do real well, for a while, maybe four full years. Congress is just a collegial body; few people in America can tell you who the leaders of the Congress are. They may know who Tip O’Neill was, but beyond that they really don’t.

MILIC: Yes, that’s really true.

ECKART: So we’re stuck with that collegialness — that collegiality. And I don’t know any way to do away with it. The shared-powers issue — as much as it stumbles and limps sometimes — is the best system I see around today. I think internally we can re-organize a lot, the Congress can. But in terms of systemic changes, I’m not sure we can.

MILIC: Churchill did say that democracy was the worst possible system, except for all the others.

ECKART: Yes, all the others. But I think internally we could do a lot. And I think the younger people there certainly want to do a lot, I know that.

MILIC: I understand that because of the reduction of population in this area, you may be redistricted out of a job. Is this real?

ECKART: Ohio loses two Congress members, and the legislature is going to do the redistricting. Depending on when this article gets printed, this may already be a moot point. They have to redistrict the whole state. Everybody has to get bigger.

MILIC: How do they decide where to take one out? Pot luck?

ECKART: They just draw the state, and make it 21 districts instead of 23. Obviously that poses political threats to all 23 of us, just as the reapportionment did to the 99 state legislators and 33 state senators.

MILIC: The fact that you’re in the 22nd doesn’t automatically mean that you’ll be eliminated along with the 23rd?

ECKART: No. I don’t know what they are going to do. I think the legislature will exercise its good wisdom on that, and having served six years in the state legislature I’m convinced they’ll be fair about it.

MILIC: In spite of some of the disadvantages of the job, I take it you would like to continue running for this difficult post, as long as possible, unless of course you have some other opportunities. But you can’t see yourself, let’s say retiring from the Congress at some future time, having had enough?

ECKART: I think there’s life after Congress. I would like to finish like Jim Brown did, on top of your game, having had an excellent season, saying “That’s it. I’ve enjoyed it, I’ve done my best.” I would hope I would have the sense to acknowledge that it’s time for someone else to come in, that I’d done as good as I can do, and to be accepted still by the people who had sent me there to represent them.
Richard Feinberg

MUSKRATS OF BRADY LAKE: A CASE OF AMERICAN TOTEMISM

In recent years there have appeared a number of magazine articles, books, and documentary films depicting life in scores of non-Western communities. As a result most readers, even those without anthropological training, have come to associate origin myths, complex territorial organization, "totemism," and other such exotica with so-called "primitive" societies of South America, Australia, Africa, or the Pacific Islands. Thus it may come as a surprise to learn that many of these traits are also found in "civilized" communities of Western Europe and North America if we view ourselves through the same anthropological lens that we use to examine others. The community of Brady Lake, Ohio, for example, an hour's drive from Cleveland, has a population mix of blue-collar and white-collar workers, business people, and university students and faculty, which makes it something of a cross-section of modern middle America. Yet certain features of its social organization are strikingly similar to those found by anthropologists in such societies as the Yanomamo Indians of Venezuela and Brazil and the Trobriand Islanders in the Western Pacific. This conclusion has emerged from an extended investigation in which I have participated as director of a Kent State University field school in cultural anthropology.1

Most noteworthy for purposes of this discussion is Brady Lake's association with a system of ideas and symbols which anthropologists designate as "totemism": the identification of a social group with a particular species of animal or plant, to which members of the group consider themselves related and which they treat with particular respect or veneration.2

The subject of totemism has a long history in the literature of anthropology. The British functionalists Bronislaw Malinowski and A.R. Radcliffe-Brown have argued that species which are important to the continued well-being of a group come to be regarded with reverence, and the group, or a discrete segment of it, assumes a responsibility to care for that species and ensure its abundance and fertility.3 Claude Lévi-Strauss, on the other hand, sees totemism as a mode of classification in which social groups are identified with natural species and differentiated from other groups in a manner reflecting the differences among natural species.4 The first view has been summed up as contending that totems are "good to eat" and the second, that they are "good to think."5

Generally, anthropologists have assumed that totemism characterizes only the most primitive hunting and gathering societies, and there have been few attempts to apply the concept to modern America or Western Europe.6 But the totemic system of Brady Lake is remarkably reminiscent of totemism in the classical sense.7 The data from

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Brady Lake suggest that both the British functionalist position of Radcliffe-Brown and Malinowski and the French structuralist interpretation of Lévi-Strauss are correct. The fact that the Brady Lake system developed within the past generation permits a historical perspective which is notably lacking in most studies of the subject; and, of course, it provides an opportunity to view a totemic system as it operates in modern "Westernized" society.

Brady Lake is a small community located in Ohio's Portage County, about midway between the city of Kent (home of Kent State University) and Ravenna, the county seat. The first historical notice of the lake dates back to the late eighteenth century, when Captain Samuel Brady of the Continental Army is said to have escaped a group of Wyandotte Indians by breathing through a hollow reed while hiding underwater. This event serves as a sort of origin myth for the community and focuses attention on the lake from a very early date.

For about a century following Brady's escape, the area immediately surrounding the lake was mostly woods and farmland. In the 1890's, the lake was made into a feeder reservoir for the Ohio-Pennsylvania Canal. In the waning years of the last century, a major tourist resort developed around the lake, complete with waterfront cottages, a dancing pavilion, boating, swimming, and assorted other forms of entertainment. In 1927 the east side of the lake was incorporated as a village.

The approach of World War II produced an influx of poorer people from western Pennsylvania, West Virginia, and Kentucky, seeking war-related jobs in Youngstown steel, Akron rubber, and the Ravenna Arsenal. Summer resort cottages were converted into low-cost permanent dwellings, and the economic status of the area declined.

In the decades following World War II new classes of residents moved in. These people included blue-collar workers with steady jobs and good incomes, schoolteachers, Kent State faculty members, and other relatively well-off people seeking a rural atmosphere within easy reach of jobs, the University, and shopping in Ravenna, Kent, and Akron. In most cases a major attraction of the area was the lake itself, to which, indeed, the community's attention has been directed throughout its history.

The lake as a sacred symbol

Beginning in 1976 the level of Lake Brady began to drop sharply. In a two-year period the surface area decreased from 99 acres to 75 acres. Residents say that the growth of algae and weeds and the appearance of unsightly mud flats have impaired the lake's appearance, and that it has lost much of its appeal to swimmers, fishermen, and boaters. As the lake has shrunk, the water level has dropped in many local wells. Some wells have gone dry, and most of the others have been affected. When our team of interviewers asked people to identify the most important prob-
lems facing the community, residents overwhelmingly selected the water crisis as the most pressing. Much time and effort have been expended in search of a solution. Innumerable hours have been spent in meetings, conferences, and informal conversations. Studies have been conducted, plans drawn up, revised, and scrapped; and water is a topic of frequent discussion.

Undoubtedly, the falling water table has created difficulties for the people of Brady Lake. Lack of water for cooking, washing clothes, and flushing toilets has transformed everyday pursuits into tests of ingenuity and will. And residents are concerned about the possible impact of the crisis on the value of their land and homes, yet the fact remains that until the recent slump in the housing market throughout the United States, Lake property values had more or less kept pace with inflation. Furthermore, residents have learned to conserve water; some have had to borrow water from neighbors, others have installed cisterns or dug deep wells at great expense.

Though inconvenience has become a daily fact of life, as far as the field researchers could tell, no one has moved out of Brady Lake because of the water problem, nor would anyone admit contemplating such a move. Many residents report that the crisis has actually helped to strengthen community bonds. Moreover, from a distance, the lake retains its almost idyllic appearance. I can attest that it is still a pleasant spot for swimming, and the fishing is as good as in any of the local lakes. Why is it, then, that everyone is so preoccupied with water and the falling level of the lake?

Evidently, water has more than a practical significance to people of the area, and the lake is more than a quantity of water: it is a shared symbol. Residents identify with the lake and are conscious of it as something that they hold in common, differentiating them from outsiders. Borrowing a technical term from the French sociologist Emile Durkheim, we would say that the lake serves as a "collective representation."*5

The importance of the lake is evident in the very fact that the community is named for it. The "origin myth" tells how the founding "ancestor" escaped death by hiding in the lake which offered him protection; and every year at Captain Brady Day this event is reenacted. Physically as well as conceptually the community is centered around the lake, and the events of Captain Brady Day take place at the water's edge.

The muskrat totem

Residents of Brady Lake describe themselves collectively as "Lakers" to distinguish themselves from outsiders. Alternatively, they identify themselves as "Muskrats." The muskrat is a water animal associated with the lake, and it is an emblem of the community. In preparation for Captain Brady Day in August, 1978, signs were posted at close intervals within about a three-mile radius of Brady Lake, encouraging visitors and residents to join the celebration; in the middle of each sign was a large picture of a muskrat. A wide variety of objects were on sale at the festivities, but the most popular appeared to be T-shirts made especially for the event, printed with a picture of a muskrat on the front and the inscription "Muskrats do it better" on the back. By mid-morning the entire stock had been sold.

Accounts vary somewhat as to how the muskrat came to be associated with Brady Lake, but the central theme is relatively constant. The term seems to have first appeared around the early 1950's, when a group of area youths formed a club and began trapping muskrats to sell the pelts for spending money. Eventually they took the name "Muskrats" for the club.

The club quickly gained a reputation as a
group of young toughs and they were viewed with disapproval by the other residents. As they got older, however, the original Muskrats either moved away or settled down to become respectable members of the community, and gradually the name came to be adopted by all residents of Brady Lake. As acceptance of the name spread through the population, a sense of identification with the animal increased. During the study, when one informant complained of muskrats destroying her vegetable garden, the interviewer suggested that she kill the pests. The informant’s horrified response was that “We couldn’t do that! Not now!” The sanctification was now well under way.

Dual organization

The territorial organization of Brady Lake exemplifies a noteworthy characteristic sometimes associated with totemism, namely “dual organization” or simply “dualism,” as it is often called in the anthropological literature. Lévi-Strauss has distinguished two varieties of dualism. The first, called “diametric dualism,” may be illustrated by the layout of the typical Yanomamo Indian village of Venezuela and Brazil. The Yanomamo arrange their dwelling houses in such a way as to form a large circle with an imaginary axis running through the center. Men and unmarried women on one side of the village constitute one patrilineage; the men and unmarried women on the other side are members of a second. A man may not marry a woman from his own side or “moiety,” but is expected to wed someone from the opposite moiety. This type of arrangement tends to be egalitarian and is oriented toward a balanced reciprocity.

The second type of dual organization is called “concentric dualism” and is exemplified by the Trobriand Islanders of the western Pacific. Once again the dwelling houses form a circle, but one side is not defined in opposition to the other. Rather, the circle of family dwellings is opposed to the center where the bachelor house and sacred dance ground are located. Such an arrangement, Lévi-Strauss contends, is inherently hierarchical and implicitly triadic. Not only is the sacred center counterposed to the periphery, which is profane, but the (human/cultural) village as a whole is counterposed to the (non-human/natural) bush beyond, which is regarded as dangerous and possessing almost an inverted sanctity.

As is the case with totemism, elaborate systems of dual organization have largely gone unnoticed in our own society, although much more roughly defined and larger-scale distinctions are familiar to many Americans: the two sides of the tracks; East Side vs. West Side; uptown and downtown; and, probably the least exact of them all, inner city and suburbs. Brady Lake is interesting in that it shows both varieties of the dualism observed by anthropological visitors to “primitive” villages. The Brady Lake community consists of dwellings distributed in a rough circle around the sacred lake, which provides a center. Beyond the periphery exists the outside world, seen as potentially dangerous and occasionally hostile.

Brady Lake’s concentric structure, however, exists simultaneously with a diametric dualism: the east side of the lake constitutes a formally incorporated village; the people on the west side reside in Franklin township. Although both sides see themselves as making up a joint community, and there are many activities in which these boundaries are overridden, a sense of differentiation and competition between the sides remains. The township residents often disparage the vil-
The moiety division is given ritual enactment each year at Captain Brady Day. A major event each year appears to be a tug-of-war between the patrons of the two taverns, each team representing its moiety. Water mediates between the two opposing sides as it is sprayed between them with a hose. The first team to be pulled through the mud puddle which soon forms in the center is the loser. True to cultural expectations, the Club House has usually emerged victorious in this test of muscle power.

Outside of the moiety system is the Spiritualist Camp, located just outside the village, north of the lake. The camp is active as a religious community during the summer months, but many people live there year-round, and most of the permanent residents have no affiliation with the Spiritualist Church. For the most part, people in the Camp ignore the other residents of Brady Lake, and vice versa. The children, however, have set up a rigid territorial division. One does not intrude upon the opposite moiety’s turf or enter the Camp unless invited. The exceptions to this rule are members of a group of youngsters calling themselves, appropriately, The Muskrats.14

The new Muskrats are not directly related to the original club, nor do they share their predecessors’ economic bonds with their animal namesakes. They are unaware of the name’s history and know only that the term is used to distinguish Lakers from outsiders. The present group of youngsters call themselves Muskrats in order to assert their identity as members of a community which they realize outsiders view with suspicion. The present Muskrats come from both moieties and from the Spiritualist Camp, and members of the club need not take cognizance of territorial boundaries within Brady Lake. The Muskrat transcends community divisions, symbolically asserting the unity and solidarity of the Lakers and their differentiation from people dwelling outside Brady Lake.

Thus many of the features anthropologists associate with "totemism" are found in the culture of Brady Lake. Residents identify with an animal species, which they use as an emblem and which serves as a symbol of solidarity and a means of distinction from outsiders. And they share a taboo against harming members of the totem species.

The historical portion of our investigation suggests that Radcliffe-Brown and Malinowski are correct when they observe that species playing an important role in the economic lives of a social group are particularly likely to become objects of a ritual attitude. The muskrat was originally chosen to symbolize the group because of its role as a source of income. Once the symbolic association became established, however, the pragmatic significance of the species faded into virtual oblivion. The muskrat became a collective representation, symbolically isomorphic with the lake: people are distinguished accor-
Left: Tug-of-war between east and west on Captain Brady Day. Right: a “Muskrat” and an “Indian” decked out for Captain Brady Day.

Thus they are confirming Lévi-Strauss’ view that social groups use natural species to symbolize relationships among themselves.

Should an anthropologist encounter such a complex of behavior and belief in a non-Western community he would without hesitation label it as a form of “totemism.” This is not to say that Brady Lake is out of step with its larger cultural surroundings, that it is a “primitive” outpost in a predominantly “civilized” society, that its residents are “deviant” or “un-American.” On the contrary, the significance of Brady Lake’s totemic system lies in its general implications for understanding Western culture, because this totemic system exists in a thoroughly typical, semi-rural American community. As Lévi-Strauss has argued, we have too often invoked the idea of totemism to make ourselves believe that we differ from so-called “primitive” people more than indeed we do. In fact, as he argues, the structure of the human thought process has varied very little over space and time, and phenomena closely analogous to those encountered among “primitives” are to be found as well in societies which take pride in being “modern” and “advanced.” The present investigation lends support to this claim.

NOTES

1Research upon which this paper is based was carried out as part of this field school. The project was begun during the summer of 1978, and has continued on both a formal and informal basis since that time. As director of the field school, I coordinated activities and mapped research strategies; most of the interviews were carried out by student participants in the program. The amount of data collected in a short time is a tribute to the student researchers’ dedication and the exemplary manner in which they conducted themselves in the field. I am particularly indebted to Mr. Martin Bramlett, a Masters’ Degree candidate who studied Brady Lake’s water crisis, for many of the data on which my analysis rests. To residents of Brady Lake, without whose patience and cooperation the investigation could not even have begun, all members of the project owe the utmost gratitude.

2Various writers have identified a series of additional characteristics with totemism. For example, totemic groups are often defined in terms of kinship or descent, and the totemic species is said to share a common ancestor with its human counterparts. Most often the community is divided into a number of distinct groups, each with its own totem. The Brady Lake Community does not exhibit such features. The identification of a social group with a natural species or a type of natural object, however, is the one characteristic which virtually all writers take to be necessary for the group to be designated as totemic; and this feature is present in Brady Lake.


Although this formulation makes the point emphatically, it is somewhat overstated. Radcliffe-Brown, following Emile Durkheim, recognizes the role of totems as shared symbols which promote social solidarity, and to this extent they are “good to think.” However, the choice of one object rather than another to represent the group, he argues, is to be explained on the basis of that object’s economic utility, and it is in this sense that we may say the significance of totems for Radcliffe-Brown lies in their being “good to eat.”

Notable exceptions include Ralph Linton’s account of the “Rainbow Division” of the American army during World War I (“Totemism and the A.E.F,” American Anthropologist, 26 [1924], 296-300) and Marshall D. Sahlins’ argument that our own use of the relationships among manufactured objects to represent relationships among groups of people constitutes a logical transformation of the mental operations we associate with totemism (Culture and Practical Reason [Chicago: University of Chicago Press, 1976]). Lévi-Strauss makes a similar argument about the relationship between the occupational castes of India and totemic clans in his now classic article, “The Bear and the Barber,” cited above.

By this I mean to indicate that although differences exist between the system found in Brady Lake and some totemic systems (see footnote 2, above), it is more typical in a number of respects than the systems described by Linton and Sahlins (see footnote 6). Of particular significance in this regard is the choice of an animal to symbolize the group and an implicit prohibition against injuring members of the totemic species.

This coincided with use of a nearby pumping station by the city of Kent to supply all of its water. Every resident of Brady Lake whom we interviewed agreed that the pumping station is responsible for the problem, and several geologists have backed this view. The Kent City Government, on the other hand, refuses to acknowledge a connection between the city’s actions and the falling level of the lake.

For example, in an initial sample of ten informants, nine identified water or water and sewage disposal as the leading problem in the community. The tenth listed water after local government as the second most serious issue. Other problems mentioned with some frequency were road maintenance and lack of public transportation.


“Do Dual Organizations Exist?”


This characterization was given by members of the investigative team in 1978. Since moving to Brady Lake in 1979, I have not observed quite such a rigid territorial system in operation. Nonetheless, children tend to associate primarily with others on their own side of the lake, with the Spiritualist Camp occupying an intermediate and somewhat anomalous position.

Lévi-Strauss, Totemism, 1-3.
Jack A. Soules

BUILDING THE ENERGY HOUSE

A physics professor tells how he put his formulas to work in the design and construction of his own energy-efficient home

Very few people build their own homes. The average family buys a house secondhand or selects one from those available in a new sub-division. Occasionally a family will choose a design from among thousands offered in "popular homes" magazines; they order plans and select a site; then they must find a builder who will build the house at an affordable price. So many important and potentially expensive decisions must be made that few families follow through on their bold intentions. Even less often does a family hire an architect to create a new design, adapted to its site and suited to the living habits of the family. Most Americans seem to have the impression that a custom-designed home can be afforded only by those for whom money is never a problem. It is true that most architect-designed homes are expensive, but that is largely because wealthy people are more apt to engage the architect's services and the fee is partly determined by what the market will bear. I offer the following account as a source of advice and encouragement to middle-income people who want a home adapted to their personal needs at a moderate price. I also wish to encourage people to develop energy-efficient homes that will remain economical well into the twenty-first century.

In purely economic terms, an architect-designed house is generally a good investment. If the architect has done his work well, the house will appreciate in value at a faster rate than others built at the same time, partly because it will use contemporary materials and design features. The average tract-house lags several years behind the best current construction methods and materials. The most significant design criterion for late twentieth-century homes is energy economy, including, in addition to much heavier insulation, improved systems for lighting, cooling, and operating necessary appliances. Only a small fraction of the homes currently under construction address such matters using best available technology.

The house I will describe is my third adventure in house building. The first, a modest ranch structure on the north side of Columbus, Ohio, was finished in March, 1954, in time for the birth of my first child. I was a graduate student at the time, just finishing my degree, and although my wife had had a job, our resources were modest, to say the least. She supervised the building of that house, and I am convinced that her obviously pregnant condition accelerated the completion by at least a month. Both the house and the baby arrived on time.

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Photos by Louis Milic
Our second house followed soon after. We had moved to New Mexico and fallen in love with the mountains, the broad expanse of desert, and the sun. This house was literally a solar house. Not only did it have a five-hundred-square-foot solar heat collector on the roof, but every angle of the roof, every door and every window was arranged to collect the sun’s rays in winter and to reject them in the summer. As most readers know, a solar collector absorbs heat directly from the sun. Normally — as in our New Mexico house — this is done by means of dark-colored pipes or other conduits through which water is pumped. When the sun warms the dark surfaces of the pipes, the heat is transferred to the water, which is then circulated to warm the house or stored in large tanks until the heat energy it holds is needed. Solar heat collectors are not to be confused with photo-voltaic converters (discussed later), which transform sunlight directly into electric current.

A schematic drawing of the desert house appears in Figure 2. The main axis of the house is set 15° from the East-West line, as illustrated in the figure. The collectors in this configuration absorb more solar energy in the afternoon — when ambient temperatures are higher — than they lose through radiation and conduction in the morning when temperatures are low. Fifteen degrees, or about one hour of sun time is optimal. My son and his wife still live in the desert house and respond as strongly to its vistas as his parents did twenty-five years ago.

After moving to Cleveland in 1968 we lived for more than a decade in a downtown
Apartment living is energy-efficient, compact, and economical, but eventually the desire for a garden, a workshop, and room for various crafts became too strong, and my wife Shirl and I realized we would have to build again.

Since the days of the desert house I have stayed in close touch with energy issues and energy conservation. These interests of mine found professional expression in an undergraduate course I developed, called “Energy,” a large part of which is devoted to analysis of cost-effective, energy-saving techniques for the home owner. During the 1950’s I gave numerous talks to community groups and colleagues, calling attention to the long-term implications of energy consumption. My lecture notes warned of an “impending oil crisis of the 1970’s.” The information I was using was remarkably accurate: it missed the date of the Arab oil embargo by only a few months. Because of my commitment to energy conservation over this 25-year period, energy efficiency was a principal criterion in the design of my third home. But experience persuaded me that energy-efficiency has to be coupled with cost-efficiency. A solar heat collector, for example, in Cleveland simply cannot gather enough energy to return the cost of its construction, even at much higher energy prices. We decided to concentrate on energy-conserving ideas that are not expensive to implement. Insulation is the most important such idea. If a house is well insulated, only a small input of energy will suffice to keep it comfortable in winter. We planned this house so that the whole place can be kept warm by an ordinary hot water heater.

Site selection took a year. Most available locations were far out in the suburbs. The daily gasoline cost for commuting into the city would far exceed our current expenditures for gasoline, heat and electricity put together. The far reaches of the county were out of the question for a family intent on conserving energy. We finally found a vacant lot for sale, at a Van Aken Rapid Transit stop just a few hundred feet from the Cleveland city limits. The lot faced south, which meant we could plan around a solar-heated entryway and south-facing windows. Actually, the house could as well have been designed to face north with the sun-gathering windows on the rear. What is most important is to protect the east-west façades, since they gather excess low-angle solar rays in the summer and yet are ineffective in gaining heat in the winter when it is needed. Figure 3 illustrates the typical angles of the sun’s rays in various seasons. Winter days are short because the arc of the sun’s path begins a bit to the south of east and ends before the sun reaches due west. On this short arc the sun reaches a maximum height in Cleveland of only 25° on December 21st, the shortest day of the year. Consequently, winter sunlight is low-angle sunlight, as Figure 3 indicates. South-facing windows can collect the sun’s energy even in the winter, but little sunlight enters east-or west-facing windows.

In the summer the sun begins its path well to the north of east and sweeps to a maximum height of 73° in the south sky before setting, again, well to the north of west. The south-facing windows can be shaded against the high-angle sunlight, but windows facing east or west will still collect unwanted heat from a sun low in the sky, during morning and afternoon hours.

The lot we chose in Shaker Heights is small, only seventy-five feet wide and an irregular one hundred fifty feet deep; all of the lots in that area are small, in fact. Since we planned to use as much of the lot as possible for the earth-pipe system — more on that later — the small lot was a restriction, but we decided to go ahead and tailor our ideas to the site. At least not much energy would have to be spent on lawn mowing.
We bought the lot and began to discuss the design. The architect of our choice was Alex Bonutti, a young man we had known since he was in high school. Our collaboration proved to be fruitful. At our first meeting I outlined to Alex the sort of ideas that seemed to me to be most important in an energy-conserving house. The basic concept is extremely simple: a heavily insulated, layered structure with a massive masonry core inside the insulation. The masonry is slow to cool in winter and slow to heat in summer. It would serve as a thermal "flywheel" to smooth out ordinary daily temperature fluctuations.

The thermal efficiency of buildings is described typically by the number of BTU's of energy¹ that are lost (or, conversely, the number that must be provided) in maintaining an interior 70°F temperature when the outside temperature is 20°F. It is the temperature difference between inside and outside that determines the heat loss. Therefore, when the average outside temperature is 20°F we have what thermal specialists call a "50°F day," the difference in temperatures in Fahrenheit degrees. The principal formula for heat loss is

\[
\Delta H = \frac{\Delta T \times A}{R}
\]

where \(\Delta H\) is the rate of heat loss in BTU's per hour, \(A\) is the total exposed surface area, \(\Delta T\) is the temperature difference between the interior and the outside air, and \(R\) is the "thermal resistance" afforded by the material used as insulation. For typical materials \(R\) increases directly with the thickness of the material (and it decreases very slightly with the temperature). Because the several external walls of a building seldom are all at the same temperature and even the interior is not always at a constant temperature, this formula for heat loss is an approximation, although a useful one, to the true state of affairs.

A typical house must inevitably have from 2000 to 5000 square feet of exposed surface above ground and another 1000 to 2000 square feet in contact with the ground. The underground temperature difference (\(\Delta T\)) is difficult to estimate because the soil is warmed by the heat flowing into it from the foundation walls, but \(\Delta T = 20°F\) degrees is a reasonable estimate for the below-ground surfaces since basement temperatures are in the vicinity of 65-70°F and the year-round temperature of subsurface earth — below the frost line, of course — is between 45° and 50°F. As an example, let us assume a typical house that has an above-ground surface of 4000 square feet with a thermal resistance of 20, and that has an underground surface of 2000 square feet with a thermal resistance of 8. To calculate the energy loss or "heat burden" required to maintain an interior 70°F in such a house, we apply the heat-loss formula:

\[
\begin{align*}
\Delta H &= \frac{4000 \times 15,000}{20} + \frac{2000 \times 5000}{8} \\
&= 10,000 + 5,000 \\
&= 15,000 \text{ BTU/hr.}
\end{align*}
\]

To this amount must be added all of the other heat losses: through windows, cracks, and air leaks, through open doors, up the various chimneys, and so on. Thus a typical house will have a heat burden of 30,000 to 60,000 BTU per hour on a 50°F day (20°F outside temperature).

I felt that a heat burden of 10,000 BTU per hour on a 50°F day was an achievable goal. To reach that figure we would need to eliminate all air leaks and drafts; we would need to control the amount and shape of the window openings; and we would, of course, need heavy insulation. We would also need a compact design with a minimum of exposed surface (designated \(A\) in our formula, you will recall).

An energy-efficient building must be tightly sealed against casual air leaks. However, a completely sealed building has a tendency to accumulate humidity and odors, and to create a generally stale, closed-up atmosphere. It is important to provide for the regular addition of fresh air, even at the cost of having to heat the air. In addition, the fires burning in the furnace, the water heater, the stove, and the fireplace require oxygen. Usually the burning fire creates a slight pressure drop within the building, enough to draw cold outside air through any available crack or leak. Often an otherwise comfortably heated room will have unpleasant cold drafts near windows or other sources of cold air actively drawn into the building in this way. The best practice is to provide air ducts directly from outside to the various burners. A three- or four-inch diameter pipe is adequate for a stove, hot water heater, or fireplace.

¹One British Thermal Unit (BTU) of heat is required to warm one pound of water one Fahrenheit degree. An equivalent amount must be removed in order to cool the water one degree. It requires only .087 BTU to warm one cubic foot of air one Fahrenheit degree.
A six-inch pipe is large enough for a typical gas or oil furnace.

In a typical house with a volume of 25,000 cubic feet, the comfort of the occupants dictates that the air should be completely changed every four to six hours. A flow rate of mere 100 cubic feet per minute — 6000 cubic feet per hour — is sufficient for that purpose. Heating 6000 cubic feet (nearly 500 pounds) of cold fresh air per hour through a temperature difference of 30°F requires nearly 15,000 BTU of energy. At the current price of natural gas, that costs about four cents, which adds up to about a dollar a day.

We decided to reduce slightly the rate of air change and to use an earth-pipe heat source to provide about two-thirds of the heat necessary to warm the fresh air. It may seem strange at first to think of the cold wet clay of Shaker Heights as a heat source, but as long as the earth is warmer than the winter air it can be used for that purpose. The deep-soil temperature in Shaker Heights — that is, at a depth of eight feet or more — is within a few degrees of 50°F. By circulating water through a buried plastic pipe, we can bring the earth’s heat into the house to preheat the fresh air up to about 50°F. The final twenty degrees of warming of the fresh air must, of course, be provided from the conventional furnace or similar source.

Our design called for eight 125-foot loops of earth pipe, each loop with a flow rate of one pound of water (one pint) per minute (see figure 4). By using eight smaller loops rather than one long one we took out insurance against leaks and similar catastrophes. At the planned flow-rate, we would have 480 lbs. of water per hour, enough to provide more than 10,000 BTU per hour. The actual heat available depends on the efficiency of the transfer of heat energy from the water to the air inside the house. This transfer is made by a heat exchanger of some sort; a very inexpensive one can be fashioned from a discarded automobile radiator.

The energy required to pump the water through the earth pipe is less than 100 watts (about 340 BTU per hour). Even at the high cost of electrical energy relative to gas, the earth pipe provides a lot of heat for the money. We estimated the total cost of its construction including excavation, pipe, fittings, pump and heat exchanger to be about $1500.00.

I have described the earth-pipe system as a heating device, and have looked at costs in that capacity only. But since the temperature of the deep earth in both summer and winter remains precisely the year-round average of the temperature at the surface, the earth can also be used to cool the house in summer. The earth pipe really pays for itself when it is used as an air conditioner and dehumidifier in the summer. The payoff is high because air conditioning and humidifying by conventional means use electrical energy, which is the most expensive form of energy, as is evident from Table I.

<table>
<thead>
<tr>
<th>Energy Content</th>
<th>Cost per million BTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>natural gas</td>
<td>$3.40 to $4.00</td>
</tr>
<tr>
<td>heating oil</td>
<td>$8.00 to $10.00</td>
</tr>
<tr>
<td>gasoline</td>
<td>$10.00 to $11.00</td>
</tr>
<tr>
<td>coal</td>
<td>$3.00 to $4.50</td>
</tr>
<tr>
<td>electricity</td>
<td>$25.00 to $27.00</td>
</tr>
</tbody>
</table>

1Watts and BTU’s per hour represent a rate of energy transfer. One BTU is equivalent to 1054 joules. One BTU per second is therefore 1054 joules per second, which is 1054 watts. Therefore 100 watts is .959 BTU per second, or 341 BTU per hour.

2The contribution to the temperature from the heat of the earth’s core is negligible near the surface.
Pipes for underground circulation of water enter through cellar wall.

In summer the water from the pipes — now colder than the outside air — is capable of extracting up to 10,000 BTU per hour from the air. The chilled surface of the heat exchanger also condenses out much of the humidity that occasionally makes Cleveland's summer air so uncomfortable.

Rather less can be stated categorically about the heat-absorption of the soil. As cold circulating water is returned from the house to the earth in the winter, the temperature near the buried pipe will fall. The magnitude of the fall depends on the density of the soil and the rate at which heat flows into the pipe. Wet clay is probably the best kind of soil to surround an earth-pipe system such as we installed. We congratulated ourselves that Shaker Heights has an abundance of sub-surface clay.

Alex suggested a design that would put little-used areas — front hall, staircase, pantry, one of the bathrooms — outside the core of the house. The core would be maintained at a comfortable 70°F. The peripheral areas would be left hot in summer and unheated in winter to provide an additional layer of insulating space. The bathroom would, of course, have to be heated in the winter for an hour or so for predictable use in the morning and evening, but would be left cool the rest of the time. Most of the closets and storage areas of the house are placed against the outside walls, providing, in effect, an additional layer of insulation.

In addition Alex recommended "wing walls," extensions of the end walls of the house which would break the wind and reduce its tendency to scrub away the layer of warm air lying next to the outside walls. I added a number of suggestions such as folding styrofoam shutters instead of window shades, and tiltable mirrors on the window sills. When the mirrors lie flat on the sills they collect skylight (or sunlight in the case of the south-facing windows) and reflect it onto the ceiling, noticeably increasing the light in the rooms. That is the winter configuration. In summer the mirrors on the south side are tilted up to about a 45° angle. In this position they intercept almost all of the direct rays of the sun and reflect them back out the window. I was at the time uncertain what net effect this would have on interior temperatures, but experience through the first summer showed about a 10°F temperature reduction in the stairway and rooms with a southern exposure.

In a few weeks Alex returned with some sketches of the design he had in mind. Not only had he succeeded in incorporating almost every one of my suggestions, but he had achieved a design that would fit into the Shaker Heights neighborhood, and one that was open, airy, and obviously comfortable to
live and work in. It didn’t even look like an energy house. After some minor changes in landscaping details and a reworking of one of the rooflines, the Shaker Heights Architectural Board accepted the plan and approved construction. Since Shaker Heights is a community with a formidable reputation for conservative architecture and building codes, approval was a major triumph for both Alex and me.

Reduced to its simple elements, the house is a box fifty feet long, twenty feet wide and seventeen feet high above ground with a basement nine feet deep below ground. Altogether there are 2380 square feet of sidewall above ground, 1260 square feet of sidewall in the basement, 1000 square feet of basement floor and 1000 square feet of attic surface. With an R value of 80 in the attic — see the table of R values below — I calculated a heat loss (50°F temperature difference) of 625 BTU per hour. (I invite the reader to check the calculation using the heat-loss formula given earlier in the article.) With an R of 35 in the walls, the heat loss through the above-ground walls is 3400 BTU per hour. The basement walls, with an R of about 20, have a modest heat loss of 2260 BTU per hour.

I had originally suggested piling earth part way up the outside walls to reduce heat losses even further. When I finally completed the calculations it was clear that the earth banks lowered the heat loss by only a few hundred BTU per hour. The earth banks stayed, however: Alex used them creatively, to lower the profile of the house, a good trick for a two-story house on a narrow lot. An additional merit of the earth banks is that we can have flowers growing right outside the windows.

The windows in the design required special treatment. Altogether there are about 180 square feet of glass through which heat can be lost. Forty percent of that glass is in sliding doors which open into the front and rear entry ways. The heat loss through the glass doors depends on the temperature of the glassed-in entry ways, as the heat-loss formula clearly shows. When the sun is out, the south entry actually gains a few thousand BTU per hour. At night, however, the losses must be considered.

### Table II. Thermal Resistance of Common Materials

<table>
<thead>
<tr>
<th>Material</th>
<th>R (per inch of thickness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>brick, concrete</td>
<td>0.1 to 0.2</td>
</tr>
<tr>
<td>metals</td>
<td>0.0011 to 0.006</td>
</tr>
<tr>
<td>glass</td>
<td>4</td>
</tr>
<tr>
<td>wood</td>
<td>0.9 to 1.2</td>
</tr>
<tr>
<td>sawdust, cork board</td>
<td>2.4 to 2.9</td>
</tr>
<tr>
<td>gypsum wallboard</td>
<td>0.8</td>
</tr>
<tr>
<td>glass fiber</td>
<td>3.8 to 4.5</td>
</tr>
<tr>
<td>styrene foam</td>
<td>3.8 to 4.5</td>
</tr>
<tr>
<td>urethane foam</td>
<td>5.5 to 5.9</td>
</tr>
<tr>
<td>urea-formaldehyde foam</td>
<td>6.25</td>
</tr>
<tr>
<td>micro-entraped air</td>
<td>0.24</td>
</tr>
<tr>
<td>water</td>
<td></td>
</tr>
<tr>
<td>still air surface</td>
<td>0.6 to 0.9</td>
</tr>
<tr>
<td>moving air surface</td>
<td>2.2 to 3.3</td>
</tr>
<tr>
<td>still air with reflective surface</td>
<td>1.1 to 4.5</td>
</tr>
</tbody>
</table>

*For reasons that are too complicated to be gone into here, the R value depends on the slope of the surface.*

As you can see from the table of thermal resistances (Table II), glass is a very poor insulator, its R value being less than 1.0. The waxed-paper windows of our forefathers’ log cabins did about as well to keep out the cold. The glass surface — or any surface for that

---

*FIG. 6: CUTAWAY VIEW OF THE ENERGY HOUSE*
matter — insulates by holding a layer of air immobile on each side. The insulation effect of the still air contributes an R of about 1.0 for each surface. When the wind blows and the outside layer of still air is scrubbed away, the R value drops precipitously. In order to reduce the heat loss through the windows to a few thousand BTU per hour, we would need an effective R value of 4 or 5 at the windows, as you can see from the calculation based on our heat-loss formula:

\[
H = \frac{180 \text{ sq. ft} \times 50°F}{R} = 9000
\]

The window design we adopted for use throughout the house is two feet by eight feet and set into the walls with the long dimension horizontal so as to reduce convection of air over the surface. The windows are double-glazed and provide an R of 3 in calm air and 2 when the wind blows. However, by recessing the windows into thick walls we increase the thickness of the still air layer on the inside several fold. The window design has survived the crucial test: it is possible to sit comfortably under a window without feeling a draft. In addition, folding styrofoam shutters can be used to cover the windows in extremely cold weather. The one-inch styrofoam adds an increment of 5 to 6 to the unshuttered R value,* and reduces the total window heat loss to less than 2000 BTU per hour.

The layered walls of the house are nearly twenty inches thick. The outer layer, made of decorative block, contributes little to the thermal resistance, as the table of R-values shows, but should provide a durable surface for a century. Inside this veneer is a four-inch slab of urea-formaldehyde foam, formed in place a few feet at a time as the walls were erected. The main bearing walls are hollow concrete block, twelve inches thick in the basement and eight inches above ground. With foam in the cores, the block adds an additional 8 or 10 to the R value. Next to the inside surface of the block is a 1 1/2 inch air space and a layer of gypsum wallboard — above ground — adding another 2 or 3 to the R value. The reader will recall that in calculating heat loss through the sidewalls of the house, I assigned — without explanation — an R value of 35 to the above-ground walls. A brief glance at the table of thermal resistance value and a few simple multiplications will assure the reader that a value in the range of 30-35 is not unreasonable.

*Remember that, in addition to the thermal resistance of the styrofoam, whose R is about 4.5 per inch, there is an additional surface of still air.

Many of the energy ideas in the house are applicable to any home. The heat from the kitchen stove and oven is vented directly up the chimney in the summer to keep the kitchen cool. The refrigerator and freezer are in unheated areas to reduce energy consumption during the eight cool months of the year and to reduce heat buildup in the summer. Fluorescent lights, which produce very little heat, are used whenever they are practical or acceptable. All of the windows in the house are permanently sealed except for five which are deliberately arranged to provide ventilation. Two of these are the sliding glass doors which have already been mentioned and which are part of the distinctive entrance and exit systems of the house.

The south entryway is a greenhouse; it is the dominant feature of the south facade of the house, as a quick glance at Figure 5 will suggest. The greenhouse is twenty feet long and sloped up from eight feet at its front wall to about eleven feet where it joins the house. It is framed in wood and glazed with 1/4 inch acrylic sheets. The principal purpose of the entryway is to protect the front doors of the house from temperature extremes. In both winter and summer anyone entering the house must go through two doors, thereby eliminating drafts and sudden temperature changes. (I estimate that entering a typical house on a winter day admits more than 100 cubic feet of cold air, which requires about 500 BTU to heat.) The greenhouse provides an attractive facade with flowers and greenery, and the same plants can be viewed from the living room, giving an impression of enlarged space to the interior of the house. Finally, although Cleveland’s sunny days in winter are few, the greenhouse does gather a lot of heat on those few days when it is available. On these days I can leave open the door to the living room along with the door from the greenhouse into the entryway and the door from the hall staircase to the second floor. With these three doors open, a warm gentle wind flows up the staircase displacing cooler air from the living room to the greenhouse. A few thousand BTU per hour — I haven’t measured the temperature or flow rate — can be gathered. The air brings needed humidity and the scent of flowers into the house as well.

The north entry is also an acrylic glazed greenhouse. Although it doesn’t gather much solar energy directly, it does provide
North entry (back of house) has glazed foyer to prevent heat loss.

above-freezing temperatures and shelter for plants until late in the fall. Like the south entry, its principal purpose is to shelter the rear doorway. The north greenhouse also brings a lot of light into the central dining area of the house. Glazed entryways are a very economical way to bring needed light into a building without excessive heat loss—either from drafts or from conduction.

Up to this point I have provided an idealized picture of home building, and in doing so I may have lulled the reader into an unwarranted sense of optimism. While design problems are challenging and planning a home is especially rewarding, the house itself does not spring from the earth unassisted. In fact, building a house is a tough project and one beset with pitfalls. The first step is to arrange funding.

Our modest dream house seemed terribly large and frighteningly expensive. Alex estimated a total cost around $100,000.00. I had hoped for $80,000.00. Another architect friend guessed it would be close to $150,000.00. And on top of that, prices were going up at about 1% per month. The previous year of planning had cost us $12,000.00. Interest rates, although erratic, have a tendency to follow inflation. Rates which had been 8% or 9% a year earlier had become 11% and 12%. I began shopping for money with the fear that I was already too late.

In my earlier house adventures, money had not been a problem. Bankers seemed eager to risk large sums on a young couple with good financial prospects. I had several times walked into the bank in New Mexico and walked out with thousands of dollars. In Cleveland, in spite of a decade of residence and good credit, I could find no bank interested in financing our house. This was due in part to a general dearth of funds. Most banks seemed to funnel what money they did have to established builders. A few banks raised their eyebrows and sniffed when I suggested that I would, with subcontractors, build the house myself. After two months I was feeling pretty low. (Remember that inflation of $1000.00 per month!)

A friend suggested a savings and loan company that I had not approached before. My phone call produced an invitation to discuss the project, and the loan was agreed to with a handshake within twenty-four hours. The interest rate, management fees, and other arrangements were all superior to most of those available in the community. (Since my account is not intended to promote savings and loan companies, but only to describe the pitfalls of home-building, I will not mention the name of my savings and loan company, but I will be happy to give details to anyone who inquires.) Throughout the many months of construction my relations with the savings and loan company continued to be amicable and professional, a matter of no small importance to a builder. Subcontractors and workmen must be paid on time. If they receive their money promptly they are more apt to come to the job when they say they will, to do good work, and to finish on time. A good bank or savings and loan institution is essential to an economical and timely construction job; conversely, a few delays in getting people paid and the whole project will begin to slip further and further behind schedule.

An important event had occurred during the period when I was shopping for money. Our son Bill, who had recently graduated from college, wasn’t very enthusiastic about the job offers he had received. He decided to come and live with us and to build the house. From the day of his arrival he was the foreman, chief carpenter, hiring agent, and inspector. What he lacked in experience he made up for in intelligence and good will. Bill would offer himself as a helper and go-fer to whatever craftsman he had hired; soon he wound up working side by side with the higher-paid artisan. By the time the house was finished, Bill had acquired sufficient experience to be offered jobs as a carpenter, electrician, mechanic, and in several other trades. After a year, however, and with the house still months from completion, he decided to go back to graduate school. The building trades lost a good man!
Building a house is a challenge to ingenuity no matter how routine the tasks may appear. No two problems are alike, and every problem requires decisions that affect the ultimate cost. A one-day delay costs about $50.00 in interest charges even when no one is on the payroll. A craftsman who is idle or unproductive for a half-day costs about $100.00. Time is even more precious than materials!

Delays in arranging financing led, in fact, to a long series of events each of which added further delays — and additional costs — to the project. Our first unexpected problem — and expense — was to dispose of the excess dirt that came out of the excavation. We estimated that about 300 cubic yards would have to be removed. I ran an ad in the newspaper for a few days offering free fill dirt in exchange for a place to put it. To each of the half dozen serious inquiries I responded that I would calculate the most economical offer and contract with that person. The economical site proved to be about four miles away, but hauling fifty truckloads of dirt that far still cost well over a thousand dollars.

We finally broke ground in October and then pushed valiantly to get the masonry work done before cold weather stopped us. A frame building can progress all winter, but mortar laid at temperatures below about 25°F will freeze. The hydration process which causes the mortar to "set" is "exothermic," that is, it releases heat. Because of this heat, mortar will not freeze at 32°F, but only a few degrees of leeway is possible. Mortar with ice crystals in it will not develop strength at all but will set to a mushy consistency.

The cold weather did hold back until January, but we were too far behind schedule. When the bitter cold days came, we were still two weeks short of putting a roof on. The delays were typical of construction projects everywhere. For example, when the basement walls were built the blocks had to be filled with foam insulation before the next courses of block could be laid. But the insulation contractor had equipment problems and was a few days late. Then when the walls reached the first floor level, carpenters had to frame the floor so that the masons would have a place to stand while working. There was another delay of a few days until the carpenters could fit us into their schedule. And so it went as the walls went up in fits and starts. The masons themselves were incredibly fast. Once they arrived and installed their scaffolds the walls simply leaped up. But after each spurt of activity, a new obstacle would cancel out the progress.

When winter finally hit full blast we were confronted with a new problem. If wet earth freezes and expands it can crush a foundation wall. Ordinarily, in a finished home, enough heat leaks through the basement walls to prevent the ground from freezing. In addition, the ground next to the walls is kept dry by the roof overhang and by gutters and drainage pipes, so that there is little water to freeze. Unfortunately a foundation with no house on it cannot be kept dry or warm, and frost expansion is a serious problem. By running a large kerosene heater in the basement for several hours a day during the most severe weather, we managed to avoid most of the consequences of freezing. One wall moved about an inch, but the masons were able to restore the strength and the plumb. The wall is now hidden under insulation and plaster without complication.

The time came to install the roof trusses. Each of these rigid triangular frames weighed about one hundred pounds and had to be hauled up to the top of the walls and nailed in place. Bill and I managed to lift and place about half of the three dozen trusses the first afternoon. The next day I discovered he had finished the job alone, using a combination of ramps, levers, ropes and brute strength. By the time we were nailing on the plywood roof sheathing, Bill was as adept as a circus performer.

The garage trusses provided a different problem. In spite of more than twenty years of education, including plenty of graduate courses in mathematics, I had managed to order the trusses two feet too long. Bill patiently dismantled each one and rebuilt it to fit. He then framed the roof hip, a challenging exercise in geometry for a novice carpenter. With the garage roof on we finally had a place to store materials out of the weather.

Once the walls are up and the roof is in place a house looks as though it is nearly finished. Nothing could be further from the truth. The walls and roof are, after all, only a shell in which to put the systems that make modern life comfortable. Windows and doors go on first, to protect against both water damage and theft. Then floors that were simply rough plywood sheathing on joists must have a second layer added to provide strength and beauty. Although the roof was easy to sheath in plywood, we hired a roofing contractor to put the shingles in place. This was a job Bill could have done but his time was limited and it seemed better to invest it in other tasks. He had left by the time we had to hang the large, heavy garage door, and Shirl and I had to manage that trying exercise ourselves.
I did the electrical work myself. It took me much longer than a professional would have required and more material too, since I over-ordered some things and wasted others, but it did finally pass inspection. And I certainly know where every wire is. I failed, however, to take the good advice of a friend and photograph all of the walls before putting up the finish surface. It would be really handy to know where each stud is. A future owner won't remember where the wires are either, even if I can.

Fortunately, building a home is not just drudgery. There is romance even in the most mundane details. Consider concrete: plastic, adaptable, easily worked when wet, and yet strong, permanent, and attractive when set. Thin membranes of concrete cover some magnificent buildings around the world, while huge blocks of concrete dam up some of the great rivers. I am fascinated by concrete, historically one of the first composite building materials. Though pure or homogeneous materials such as glass or marble may have a higher theoretical strength than a composite material, once they begin to crack, a simple fracture is produced which quickly runs through the whole mass of material. But when a crack starts in a composite material, it propagates only to the boundary of the next bit of component material — for instance the next particle of sand or gravel — at which point it usually follows the interface rather than proceeding directly into the particle. As a result a much larger number of atoms must be separated to propagate the crack. Separating more atoms requires more energy than would be necessary to extend a straight line crack, which is equivalent to saying that the material is stronger. Thus by impeding the movement of cracks, dislocations, and imperfections, composite materials can approach the theoretical strength of pure materials. And to this strength is added their other advantages such as ease of handling and shaping. To achieve its greatest strength, of course, concrete must have just the right mixture of gravel of various sizes, sand, and Portland cement. Even the cement itself is not a pure material but a mixture of several hydrated carbonates and silicates. The thorough study of concrete in itself opens up into vast areas of chemistry and physics!

As the frame of the house is erected, a number of areas become less accessible. We had not poured the concrete floor in the basement and now faced the task of lowering twenty cubic yards of concrete down the stairwell, a few gallons at a time. My affection for concrete began noticeably to cool. Fortunately, the masons returned, chopped a hole in the foundation wall, and proceeded to pour the concrete through the hole. When all was firmly set they returned to brick up the hole. The brute-force method saved an incredible amount of work handling concrete, but I would never have thought of it.

I neglected to mention the trees we had to cut down. Their contribution to the house was minor but it became a symbol of all our efforts. The saga of the trees began when I decided to use the two oaks on the site for lumber rather than to cut them up into firewood. When the heavy-equipment man who
prepared the site and did the excavating heard of my intentions, he offered a third log, which was already at the sawmill. The sawyer was less enthusiastic than I. The logs were "pin oak. Full of knots. Grain goes every which way." We finished them anyway and, admittedly, suffered a good deal of waste. However, I find the twisting grain of pin oak more attractive than the familiar straight-grained white oak, thus making an advantage out of a liability. Pin oak requires more care in cutting and finishing, but the results are worth it.

When our two tons of logs were sawed into boards we faced a second problem. The local kiln could take only one-inch-thick material. Our heavier pieces took longer to dry properly and did not fit their drying schedule. Luckily, we were able to make arrangements to borrow a basement room in the apartment house where we were still living. We weighed each of the boards and then carefully stacked them to permit maximum air circulation. A small sample was weighed and then oven dried. It lost about 25% of its weight in drying. This gave us a reference for the rest of the pile. Every week or two for several months we reweighed and restacked our hoard until each of the boards had lost about 18% of its original weight. Then the dried lumber had to be hauled back to the mill — far out in Chesterland — for planing and finishing. There was a lot of unanticipated labor in this project, but the kitchen cabinets, dining room floor, balconies and staircases attest to our labor and offer ample evidence of the beauty of natural wood.

Energy conservation is very much in the public consciousness these days. Whenever our "energy house" is mentioned, people immediately assume that it is a "solar house," which generally means a solar-heated house. The public has been led to equate solar heating with energy conservation. Of course, on clear days the south greenhouse does capture thousands of BTU's from the sun. But ours is not primarily a solar-heated house. It is designed to conserve energy, mainly by copious insulation, rather than to capture and use solar energy. We have no furnace: our heat comes from an ordinary 50-gallon, natural-gas-burning hot water heater, which costs $150 new. Hot water from the heater, circulated through the rooms, is sufficient to keep the entire house warm.

Solar energy is not very abundant in Cleveland in the winter because of the heavy blanket of clouds that generally hangs over the southern shore of Lake Erie. In fact, Cleveland is one of the two or three worst regions in the country in which to harvest solar energy. Most people think first of solar energy for home heating, but that is probably the least promising application. In the winter when the heat is most needed it is least available. It is far better to use the sun's heat to produce domestic hot water all year around, or to provide electricity, again, a year-round commodity. In these applications the solar collectors pay back their cost continuously rather than for a few, cold, dark months.

<table>
<thead>
<tr>
<th>TABLE III</th>
<th>Solar Radiation Input—Average, in BTU per square foot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Summer High Month</td>
</tr>
<tr>
<td>Cleveland</td>
<td>2,220</td>
</tr>
<tr>
<td>Dallas</td>
<td>2,360</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>3,170</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE IV</th>
<th>Cleveland Heating Degree-Days* (Average 1941–1970)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
<tr>
<td>FEB</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
<tr>
<td>MAR</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
<tr>
<td>APR</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
<tr>
<td>MAY</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
<tr>
<td>JUN</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
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<td>JUL</td>
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<td>OCT</td>
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<tr>
<td>NOV</td>
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</tr>
<tr>
<td>DEC</td>
<td>1181 1039 965 501 244 40 9 17 95 354 792 1076</td>
</tr>
</tbody>
</table>

*To calculate heating degree days per month, count each hour when the temperature is below 68°F and add together all the temperature deficits. Do not include hours when temperature is above 68°F. Divide the sum by 24 to produce heating degree days.

Some representative figures might help to illustrate the point. A solar heat collector on the "energy house" could be about five hundred square feet and would collect 1000 to 1500 BTU per day per square foot. The resulting yield — about 500,000 BTU — would heat the house for two days. Unfortunately the sun in Cleveland does not come out reliably every two days. It is necessary to plan for an average of one day of sun in three. More practically, there are many periods when there are seven or eight cloudy days in a row, requiring a reserve or storage capacity of up to two million BTU's. At current prices a half million BTU's are worth less than two dollars. Even if the sun shone every day, it would be hard to justify spending several thousand dollars to collect $100-200 worth of energy annually.³

The greatest potential for solar energy is

³This simple-minded treatment ignores depreciation and maintenance costs and also ignores the probability that natural gas prices will increase faster than the general price index.
in photo-voltaic converters, silicon solar cells that generate about one-half volt each and a current of about 20 amperes per square foot in bright sunlight. Although the total amount of energy collected in such devices is comparable to the energy collected in a hot-air or hot-water solar collector, the value of the energy is much higher. For example, a half-million BTU's of electrical energy (146.4 kilowatt hours) is worth about thirteen dollars at current prices (see Table 1 above) compared to a couple of dollars for heat energy. Furthermore, a photovoltaic collector is valuable the year round, since electrical energy is even more valuable (in the marketplace) in the summer than in the winter. It appears that mass production of solar photovoltaics is about five years away and the time when the average home will be equipped with them is twenty or thirty years in the future. In anticipation of such developments, the roof of our energy house is ideally arranged to permit the installation of photovoltaics when they become available.

Our original goal had been to finish the house before Bill had to leave. But it was clear as early as May that we would never make it. Of course, it is also true that had we had more of the work done by contractors and done less ourselves we could have moved the completion date ahead by several months. Unfortunately our available funds were clearly not going to reach to the end of the job if we spent them for unplanned-for items. We did hire many helpers, mostly young college people who were bright and energetic and quickly learned the necessary skills. But even with all the help summer dragged into fall and fall into winter and moving day still seemed always to be somewhere on the horizon. The college students had gone back to their books, I had used up my vacation time, and for a few weeks life consisted of 8:30 to 5:30 at the office followed by 6:00 to 10:30 at the house. Dinner was at 11:00! I managed to lose a few pounds, getting back to my old weight of college days, but I don't recommend this particular method of dieting.

We finally moved in on April first, a day aptly chosen to symbolize our folly. The house was certainly unfinished: heating and cooling systems were makeshift, cupboard doors and closet doors were nonexistent, most walls and woodwork were unpainted, landscaping was largely mud and weeds, and there was dirt and dust everywhere.

Now, almost a year later, the house is still unfinished but the end is in sight. Tile and linoleum are on the floors, most of the landscaping is completed and there has been progress on the paint and on the air-conditioning. We were comfortable through the hottest days of the first summer, even without the earth pipe system operating. It should be finished in time for the summer of 1982.

The winter of 1981-82 has put our house to the test. When the outside temperature reached 17° below, our hot water heater could not keep the living-dining core of the house warmer than 62° unless we lit the fireplace or the kitchen stove. With either of those fires burning, 70° was easy. The kitchen is always about 2°F cooler than the living room; the coolest bedroom is 4-5°F cooler. These figures are close to our design expectations. I have carefully noted the interior temperatures as a function of outdoor temperature. The numbers show that a significant amount of heat is being lost through the basement walls, an amount independent of outside temperature. As we complete the paneling of those walls and add shutters or acrylic panes to windows that are still unfinished, our heat needs will decline further. During the coldest period of winter, from January 10 to February 10, out heat consumption averaged 37,000 BTU per hour. This adds up to a cost of about $100 for the month. With the completion of the planned insulation, that cost will drop by about 25%.

Because of the great mass of the house it requires about 24 hours for the temperature to rise or fall noticeably. As a result the usual thermostat is unnecessary. In extremely cold weather, I turn the hot water heater up to 160°F. When it turns a bit warmer, I drop the setting to 140°F. In spring and fall 120°F has been adequate. We can fine-tune the temperature of the house by turning a single fan on or off. We warm a bedroom up above its normal temperature by turning a tiny fan that blows a gentle stream of warm air to that room. It is all manual and requires attention no oftener than once a day. We do not turn the thermostat down at night. It would take too long to warm everything up again.

I suppose I'll still be finishing cabinets and trim for another year or two. Now that the pressure is off I enjoy the work. Shirl doesn't seem too much concerned about the unfinished closets and a few unpainted walls. They'll all be done before long.

The cost? Well, we went through $120,000.00 in cash pretty quickly. In addition, my own labor has been worth maybe $10,000.00 more. We will spend about another thousand for materials to finish (including a garage door opener!). Don't ask what we would sell it for; Shirl wouldn't even discuss the question.
Prudence Tucker Heller

COLLECTING ISLANDS

At about 1:30 in the morning, at the port on the island of Astypalea, in Greece, an old woman in an armchair is taken aboard the inter-island vessel "Miaoulis"—passed hand over hand, chair and all, out of the little launch, up the wobbling rope and wood gangplank, and deposited in the second-class lounge, still sitting in her chair. There is never a chance that anyone will drop her, there are so many hands—and so much talk in the loud Greek voices. As the other passengers embark, a new rowboat is ferried out and taken on by the ship's hoist, and two new motorcycles are let down to be taken ashore. The port town, lighted up, looks like the bowl of a big wooden spoon, the kind you find hanging on the walls in antique shops. The lights of the road leading to the island's mountain-top community are the curved handle.

We are on one of our collecting trips, collecting islands. "We" are sisters: Alberta, a poet and teacher of creative writing in Cleveland, and Prudence, who writes news and features on the island known as Manhattan. We began our collection in 1970 with a trip to the Outer Hebrides. We were enticed there by a brash young Scotsman, James Boswell, who in 1773 persuaded the great and crusty man of letters Samuel Johnson to join him in touring these wild islands off the west coast of Scotland. Boswell's journal describing the tour, along with a more recent article by the son of poet Archibald MacLeish in the National Geographic, infected us too.

Our fondness for islands probably dates back to the ages of five and six, when our mother first took us on a small, slow boat to France, and seven and eight, when she took us on a small, slow boat to England. We romped on the decks with the friends that children make so easily, and consumed stacks of pancakes in the dining saloon and endless bottles of ginger ale and bowls of cheese crackers in the lounge. But most of all we watched and listened to the sea. Day after day would find us leaning over the rail, as far forward as we could get, watching the waves. At night, in our upper berths (much more exciting than lowers), we listened to the sea and to the boat creaking. The rougher it got, the happier we were. When they had to

Prudence Heller and her sister Alberta Turner (whose sheaf of island poems follows this article) were born in New York City and grew up in Westchester County, N.Y., two miles from the nearest village. The two sisters were educated at home until the seventh grade, which they entered together, there being only fourteen months' difference between their ages. Both attended Hunter College in New York. Following college Prudence began her career in journalism, and during World War II she served in the U.S. Office of War Information. She now lives in New York City and writes news and feature articles for the Associated Press. She is married to Peter Heller, an Associate Professor of Government at Manhattan College.

After college Alberta pursued graduate studies in English, receiving an M.A. from Wellesley College and a Ph.D. from Ohio State University. At Ohio State she met and married Arthur Turner and moved with him to Oberlin, where he taught English for a number of years until his recent retirement. Alberta Turner now commutes regularly between Oberlin and Cleveland, where she is a Professor of English at Cleveland State University and Director of the CSU Poetry Center. She is author of several books of poetry and criticism.

(Left: Alberta and Prudence in the Canary Islands.)
put racks around the tables to keep the dishes from skidding into our laps, we ate with added gusto—in the somewhat empty saloon.

In short, we love to cross water—salt water. Decades after those trips, we still love it. But one can cross water and reach continents, so why go to islands? Is it, perhaps, that those slow boats of our childhood were our first islands? Neat worlds full of things we liked, and of a size that we could cope with? Simple worlds, with none of the elaborate structure of today's cruises? Worlds where basics—sounding the ship's bells to tell the time, getting a meal, washing down a deck—occupy much of the day? All these qualities are what we like and look for in our island travels.

Islands, like ships, tend to be orderly places, where people have little choice but to get along with one another, and where the society tends to be self-sufficient. They're small enough that one feels one can grasp them. Each is a separate world. Every island has its own pilot to usher boats into its particular harbor. The store clerk on Malta says she supposes it would be fun to go to Gozo some day—Gozo, Malta's little sister island, being all of ten or fifteen minutes across the water on the ferry. The two young women from the Azorean island of Flores whom we meet on the inter-island ferry have never set foot on Corvo, smallest of the Azores, within sight of their own home island. So when the captain decides, as a pleasant surprise, to take us up to the crest of the extinct volcano on Corvo, they eagerly come along.

Island groups are slightly bigger worlds than individual islands, but still distinctly apart from their mainland parents, which, in fact, they often don't like. "We're African," says the hotel clerk on Tenerife, in the Canary Islands, turning his back on parent Spain. Our bed-and-breakfast hostess in Shetland wants no part of Scottish nationalism or an independent Scotland—not if it includes Shetland, anyway. The oil, she notes, is off Shetland; why share the wealth with Scotland? The people of Guernsey make it clear that it's only the Crown, not the British Parliament, that they recognize. They're self-governing, right down to their postage. "Morte a Portugal" says a bit of graffiti on a wall on Terceira, in the Azores.

Local buses combine with ferries to get the natives around on and among the islands. On the Greek island of Naxos a priest always gets a seat on a bus, even if a shorts-clad young German tourist has to be yanked from her seat by the bus starter to give him one. On Crete a mother puts her little girl on the bus to go down the mountain to visit her
grandmother; the driver and a friendly woman passenger keep an eye on her. The school children on the bus on San Miguel in the Azores horse around and toss wadded paper; their counterparts in Orkney are more decorous. From the back of a bus in the Azores, where most of the women wear black, we look over a sea of black backs.

Then there are the ferries. In the Azores most of the passengers are seasick; the captain and crew play video games—soccer and tennis. On a ferry between Canary islands we see a John Wayne movie, dubbed into Spanish. The Greeks travel from island to island in extended families, and never stop talking and moving around from seat to seat to visit with one another. We have quite an island collection by now: Hebrides, Orkney, Shetland, Channel Islands, Canaries, Azores, Magdalens, Greek assortment, Malta. If you’re interested in starting your own collection, the first step is to choose an island. You may have read something like Boswell’s account of his trip to the Hebrides or Gerald Durrell’s tales of growing up on the island of Corfu. Or you may have heard of islands like Madeira and Rhodes and Majorca all your life and want to find out whether they’re as beautiful and interesting as everyone has said they are. The choice will also depend on how you like to travel, how many people (both tourists and local folk) you want around you, what kind of weather you like—the Canaries sound wonderful in January, Malta’s mid-Mediterranean location is tempting in March, the Greek islands get cooling winds in late August—and whether you get frightened or bored if you cannot speak the local language.

You can travel the tourist way, and cruise the Greek islands in a comfortable ship, or call at the Canaries for a day or two as part of a trip to better-known destinations on mainlands. Your ship will be your hotel, or your travel agent will have made your reservations, and the chances are you’ll have a private bath. For this sort of touring, language is no problem; everyone you meet will speak a little English. And you may find perfectly delightful couples from Long Island or Dallas to share the scenery with you on the tour bus.

But we have been talking about another kind of travel. We want to discover our islands for ourselves and then throw ourselves on their mercy: “Here we are, what are you going to do with us?”

So although we often make a hotel or pension reservation for the first day of our stay—that day after we’ve sat up all night on the plane, eating, and being bumped into by passengers going to and from the toilets—that’s the only reservation we make. From then on, it’s catch-as-catch-can. And if our pie-shaped room in what looks like a store on Mykonos has the bathroom facility across the street, so what? The street’s narrow; it isn’t far to go. And the sheets and pillow cases on the beds in the pie-shaped room are fine linen, exquisitely embroidered—and exquisitely darned, and darned again. They’re paper-thin. On Malta, our bathtub is right in the bedroom, together with a sofa, two overstuffed chairs, a double bed, a single bed, an armoire and assorted other furniture.

Or we may take “bed and breakfast,” three words that can mean so much more. In remote areas like Orkney, Shetland, and the Hebrides, they mean total mothering. A full tea at bedtime—sandwiches, cake, cookies. As the wind howls and the rain pours down, the landlady tucks us in between an electric blanket and an eiderdown. Earlier, she invited us into the parlor, in front of the peat, gas, or electric fire, and regaled us with stories of people who have come before us, like the honeymooners who insisted they didn’t want a double bed.

Aside from the trans-Atlantic air fare, our trips (two or two and a half weeks) have always cost well below $1,000 apiece and usually closer to $500. This includes an occasional splurge dinner at an elegant hotel to vary the usual picnic lunches of wine, bread, cheese, tomatoes, and sardines bought at the local market. It includes a good belt or two of brandy or Glenlivet before dinner. It doesn’t include the loot we tote or send back, such as cashmere sweaters, ceramic pigs, or an antique Portuguese shrine.

Once we’ve picked our island or islands, we consult the tourist office of whatever country is involved and ask for everything—everything—it has on the subject, including boat schedules and lists of places to stay. But we don’t get everything, especially not the boat schedules. Sometimes we have to write overseas for them; the tourist office will provide the address. (In the Greek islands there are so many boats, going to so many places, that their schedules make up a fat booklet, put out monthly, and changing every month. But this is no reason to be discouraged. The makeshift schedule we devise when we’re already on the first of our boats and find out the second one isn’t going where or when we thought it would may be better than the original. We didn’t expect to see Crete, but our makeshift schedule took us there.)

And now, here are some of our islands.
The Outer Hebrides

Off the west coast of Scotland, separated from the Inner Hebrides, which hug the coast, by the Minch, a relatively small body of water that kicks up like a whole ocean. A moist climate (very moist), little arable ground, no trees to speak of. Industries: fishing (but you don’t see so many fishing boats any more), cattle and sheep, Harris tweeds, a bit of distilling (but if you’re in the Outer Hebrides, spend Sunday on Barra; you won’t get a drink anywhere else).

All this doesn’t really give an idea of the Hebrides without the wind. WIND. When it doesn’t blow, we think we’re in heaven—a heaven inhabited by a few black and white cattle, the only things enjoying the white, sun-bathed beach with us and wading in the blue-green water.

When the wind blows and the rain comes down, which is most of the time, we know we’re in the Hebrides. For instance, we are on Barra, waiting in our boarding house up the road from the pier to get the boat back to Scotland. We’re due to leave around midnight. But first the cattle boat must dock and take on all those sheep that farmers have been bringing in on boats from outlying islands or driving down the lanes of Barra to the pier. The pier is a furry, wet mass of sheep and black-and-white border collies keeping order. In the parlor of the boarding house they’re telling us that if the cattle boat makes it, the passenger boat is sure to make it too, since the captains are arch rivals. The Welsh doctor, who with her Singhalese doctor husband will be taking the boat with us, is offering seasick tablets. We’re all looking a bit askance at the other boarder, newly arrived—a somewhat silent railway clerk from Devonshire. He isn’t as genial as the rest of us.

The cattle boat finally docks, and the wind carries the barks of the dogs to us as the sheep are loaded. The bobbing lights a bit offshore are the passenger boat, waiting its turn.

Now the cattle boat pulls out and the passenger boat pulls in. We walk down the road to the pier at two or three o’clock in the morning in the wind and rain. And the Devonshire man, who doesn’t have to go out in the storm because he just arrived, is out in the wind and rain with us. He insists on seeing us off—and carrying our luggage.
The Minch seems to us, on the small boat that night, as rough as any sea we’ve ever known. We love it.

For anyone who thinks we exaggerate the Hebrides’ weather, let us cite what Boswell had to say—and he and Johnson got only to the Inner Hebrides, nearer the mainland.

Thursday, Oct. 7 [1773].—There came on a dreadful storm of wind and rain, which continued all day, and rather increased at night.

Friday, Oct. 8.—Dr. Johnson appeared to-day very weary of our present confined situation. He said, “I want to be on the main land, and go on with existence. This is a waste of life.”

They’re there, on Col, the next day. And the next:

Sunday, Oct. 10.—There was this day the most terrible storm of wind and rain that I ever remember.

Monday, Oct. 11.—We set out about eleven for the harbour; but, before we reached it so violent a storm came on, that we were obliged again to take shelter in the house of Captain M’Lean.

Tuesday, Oct. 12.—After breakfast, we made a second attempt to get to the harbour; but another storm soon convinced us that it would be in vain.

Orkney

A gentler landscape than the Outer Hebrides, though farther north. Again—wind, rain, sheep, cattle. We take the ferry from Scrabster across Pentland Firth to Stromness and walk the main street of that small, gray town. The slender, diffident man with gray, curly hair whom everybody greets is Orkney’s own poet, George Mackay Brown, a native son who decided to stay at home despite occasional sallies forth and a reputation that has carried across the Atlantic.

If you quail at the thought of getting involved in archaeology on your vacations, Orkney might be the place to cure your hangup. The standing stones of the Ring of Brodgar date from the early Iron Age. Someone was living at Skara Brae more than four thousand years ago—you can see his home. As George Mackay Brown puts it, in his prose tribute to his home island, An Orkney Tapestry, the first Orkney peoples are “beyond the reach of legend even,” although it’s thought they may have sailed their way to Orkney from the Mediterranean. In Kirkwall, St. Magnus Cathedral was founded.
in 1137 and is still in use. Among the St.
Magnus tombstones is one that says: "Here
lies an honest man."

Kirkwall is also where you get the boat
for other Orkney islands. Be on the pier at six
a.m. if you want to do the rounds of nearby
Rousay, Egilsay, and Wyre. In the tiny
lounge the steward makes a stout café-aux-
lait. We carry our cups out on deck to watch
crew, drovers and dogs load the sheep and
cattle and to watch the sun come up. Sheep
that don't know what's happening to them
look like frightened rabbits. Pink, quivering
noses; white, pointed faces; long ears
strained back. They climb on top of one an-
other to try to see what's going on. If you
want to load a steer onto a boat, we learn,
twist its tail.

Shetland

They've widened the roads in Shetland in the
past few years. Those nice single tracks with
"lay-bys" for passing weren't adequate for
traffic in the modern oil era. We ride the
buses and ferries northward from the "Main-
land" island to Yell and Unst, ending at the
northernmost community in the United
Kingdom, Norwick. The road signs pointing
to Mid Yell suggest to us a sermon topic for
the day: When you lose your temper, always
stop in Mid Yell.

Shetland: an oil rig offshore, a ship pat-
trolling the pipeline route, a Royal Air Force
early-warning radar center. And real Shet-
land ponies. It's Norse country: Lerwick
seems more a continental town than a British
or Scottish one. Is it because you eat your first
dinner at a hotel called "Kvaldaro"? Or be-
because the Shetland place names keep ending
in "voe" (Hammavoe, Burra voe), and "voe"
means fjord? Or because, if you've done your
homework, you know that the Shetlands are
the same distance from Bergen, Norway (200
miles), as they are from Aberdeen? We don't
know, but that's how we feel.

But Shetland is also for birds. On the is-
land of Noss, the only inhabitants are birds:
gannets, cormorants, fulmars, guillemots,
kittiwakes, puffins, and great skuas (fami-
iliarly known as bonxies). Bobbing in a small
launch, we look up at the rugged cliffs and
think of an enormous ruined castle turned
into an apartment house, teeming with thou-
sands of tenants, chattering, squabbling,
soaring, and fluttering.
The Channel Islands

The nineteenth-century French Romantic writer Victor Hugo lived here, most of the time on Guernsey, after he was exiled from France for his opposition to Napoleon III. He arrived in 1855 and stayed on, despite an amnesty, until 1870.

Hugo’s house in St. Peter Port is just down the hill from our pension. It is full of mirrors, Gobelin tapestries (used as wallpaper and cut in pieces to fit difficult spots), and some skillful wood carvings by Hugo himself. The mirrors, it seems, were not to reflect his own image, but to keep Hugo abreast of what was going on in his house while he was working in the multi-windowed room on the top floor. A large, open stairwell, a glass panel in the floor, and mirrors tilted at various angles did the trick.

Two of Hugo’s novels were published during his residence on Guernsey: Les Misérables, about the man imprisoned for years for stealing a loaf of bread, and Toilers of the Sea, set partly in the neighboring island of Sark and its caves, which Hugo visited.

The movie The Story of Adèle II. (about one of Hugo’s daughters) was filmed partly on Guernsey. We learn this tidbit from a bearded poet who says he played the cashier in the film’s bookstore. He takes us to a meeting of the “Poets’ Corner” at the Good Food Bar in St. Sampson. Alberta just happens to have with her a poem-in-progress (about lemmings), and she reads it to the gathering. The poetry-reading, interspersed with ballad-singing, is in full swing when the local constable shows up: that restaurant isn’t often open so late. Told the nature of the gathering, he says apologetically and appropriately, “A policeman’s lot is not a happy one,” and is forthwith taken into the kitchen for a long cup of coffee, having been assured that all the wine and beer he sees was sold before it was time to call “time.”

Channel Islanders like to say that Victor Hugo described the islands as fragments of Europe dropped by France and picked up by England. When William the Conqueror was Duke of Normandy, the islands were part of his dukedom. He joined them to the English Crown in 1066 and they remained loyal to King John of England when, in 1204, Philip II of France confiscated the Duchy of Normandy. The Channel Islands have a special status now that recalls their history: they recognize the British Crown, but they have their own parliaments, postage and currency. The islands are divided into two “bailiwicks,” Jersey (consisting of the island of that name, biggest of the Channel Islands) and Guernsey (representing the islands of Guernsey, Sark, Jethou, Alderney, Herm and others).

We say “representing” advisedly, for on Sark we’re reminded that this island has a special status too. Queen Elizabeth I granted Sark to Helier de Carteret, of Jersey, in 1565, after he had fulfilled certain conditions, notably that of colonizing the island, within two years, with forty men loyal to the Crown. Before that, Sark was primarily a pirate hangout and a threat to the security of the other islands. The feudal system of Carteret’s days still survives. And the Guernseyans, respectful of its special status, take the attitude that they and the people of Sark “help each other out.” The Dame of Sark, who ruled it until 1974, is dead now. But her grandson, Michael Beaumont, keeps it so neat the old lady would be proud.

There are no automobiles on Sark, so if you don’t want to walk, you take a horse-cart or a bike. We choose the horse-cart. Nothing but footpower, however, will take us down to one of those beaches sheltered by rocks, where more than five people is a crowd. So easy to go down; such toil to return. Another day we go up first and then down, at Orgueil Castle on Jersey. As we climb, we pass St. George’s Tower, dating from the thirteenth century, and Queen Elizabeth’s Gate, dating from the seventeenth. Queen Victoria and Albert visited here. The Germans took over in World War II; some of their “bell bombs” are hanging from the walls.

On Jersey we visit the zoo established by Gerald Durrell, author of My Family and Other Animals (his brother Lawrence wrote the Alexandria Quartet). The signs say simply “The Zoo,” but we know from reading Durrell’s books that zoos for him are not just places to take the kids for a day in the sun but life-or-death business—the life or death of whole species of wild animals. Durrell sees things from the animals’ viewpoint, and can sympathize with a creature in an unfortunate situation, like the two brow-leaf toads in Cameroon emerging from the basket in which they were captives: “they waddled out onto the floor with all the indignation and dignity of a couple of Lord Mayors who had been accidentally locked in a public lavatory” (The Ba-fut Bengales).

In Durrell’s zoo, as in some of our own zoos, we see some animals in “natural” settings: wallabies resting in the shade of trees, big cats snoozing in a pasture. But other animals are in cages; Durrell says, in describing his own zoo in The Stationary Ark, that if the cage is right for the animal, we should stop
worrying and complaining about its captivity. For animals in the wild, he explains, are not really roaming all over the wide open spaces; they live in limited “territories” ranging from a few square feet to a few square miles. The idea is to make the animal’s cage a substitute territory, which means making the animal—and not you or the zoo architect—feel at home. “Home” may have to be a certain shape, or have a certain number of branches to climb on, or a bit of sand. An animal wants a suitable mate or mates and needs food “considered interesting by the animal and nutritional by you,” and “as much freedom from boredom as possible.” By that, Durrell means plenty of “furniture” in the cage, and, if possible, neighbor animals to communicate with. In the gorilla maternity ward we see how successful some of these efforts are. There’s a list of births, and we watch a gorilla mother contemplate her baby. She sits with her legs crossed and folded in front of her, tail curled, holding her child facing her, so that all we see is the back of the baby’s grapefruit-sized head. But we see the rapt look on the mother’s face. Wonder? Curiosity? On a dais near her, the male gorilla arranges himself and surveys us.

The Canary Islands

There are seven of them plus assorted islets, born of volcanic action, lying off the northwest coast of Africa but politically a part of Spain. Originally they were inhabited by a people known as the Guanches, believed to be of Berber stock. The Greeks, Carthaginians, Phoenicians, Romans and Moors came there. These islands may well be the original Elysian Fields, the Garden of the Hesperides, the Fortunate Isles of the ancients; their benign climate makes you feel they deserve to be identified as the home of blessed spirits. The finches we know as canaries are there in abundance, singing away in cages inside or outside almost every window. But the birds get their name from the islands, not the other way around. The islands’ name derives from the Latin word canis, referring to the dogs the Romans found there.

The Canaries lie at the crossroads of the shipping routes linking Europe, the Middle East, Africa and America. Columbus stopped there to take on food and water, and he heard Mass in the Asunción Church, on the island of Gomera, before he set out for America. Today the Canaries boast some of the busiest ports of all Spain, including Las Palmas (Puerto de la Luz), on Grand Canary, and Santa Cruz, on Tenerife. Puerto de la Luz is said by some to rank first among Spanish ports in tonnage of freight. And to that you can add tons of tourists.

The Canaries’ mountain slopes are pitted with fertile soil for forests, banana groves plunging down hillsides to the sea, and a variety of market garden crops. There are coffee and almond trees, fields of sugar cane and tomatoes, and vineyards. Some of the islands are quite green, but some get little rainfall, and Lanzarote, closer to the African coast than it is to Las Palmas, gets almost none. What’s more, volcanic eruptions in the eighteenth and nineteenth centuries left Lanzarote with an almost lunar desert landscape of cones and blackened valleys, but pockmarked also with tiny craters of man’s devising, in which an agriculture flourishes. The
secret, they say, is volcanic ash. Spread over those crater fields, the ash absorbs enough moisture from night dew to grow watermelons and grapes.

While the Danish, German, English and other tourists wine and dine and stroll on the corniche in Las Palmas, we take the local boat to Lanzarote. And we take a camel for a small tour of the island. We dangle in wicker seats, one on either side of the animal, like panniers on a donkey. Camels cannot be kept too close to one another, or to tourists, because they will nip. We have never seen a camel smile.

Tenerife, largest of the Canary Islands, seems as tall as it is wide. It is a calendar of seasons: a minibus climbs past bananas at sea level up through market garden crops, then orchards, then pine forest to the bare, snowy face of Pico de Teide, more than 12,000 feet tall, the highest peak on Spanish soil—all in two and a half hours. But actually a smaller Canary island, La Palma, farther out than Tenerife, has the greatest altitude in the world in relation to its perimeter: it covers only 437 square miles, and its Roque de los Muchachos is almost 8,000 feet high. In the fishing village of Tazacorte on La Palma we sit under a banana-leaf thatch for a feast of fish, bite-size potatoes in oil and garlic, and local wine out of an old gin bottle.

In Santa Cruz de la Palma they’re touch-up a church for a festival. The Virgin Mary and assorted saints are stretched out on the floor in a corner while a man on a ladder freshens wall and niches with a paintbrush. He smiles at us. You get a feeling of welcome and intimacy in just about any church, large or small, in the Canary Islands. The Madonna dripping with the jewels that the faithful have draped on her in the sanctuary of the Virgen del Pino on Grand Canary does not seem gaudy, just moving. In contrast, Greek churches with their incense and old women in black cleaning the glittering altar pieces make us feel that we’re not dressed right and probably would not do the right thing if we went inside. So we stay outside.

The Azores

When we told a friend in New York that we were going to the Azores, she wondered, as almost everyone else does, just where they are. She recalled the poem about Columbus, by Joaquin Miller, that children used to have to memorize: “Behind him lay the gray Azores...” The Azores—there are nine of them—are in the Atlantic about two thirds of the way from New York to Lisbon. They are relatives of the Canaries, having the same volcanic birth. They are, in a way, Portugal’s Canary Islands. As Tenerife boasts the highest mountain of Spain, Pico Island in the Azores has the highest peak of Portugal—the mountain of Pico, about 7,700 feet high.

The volcano craters, like those of the Canary Islands, are now peaceful scenes of lakes, fields and villages. But the earth hasn’t settled its accounts with the Azores yet. On New Year’s Day in 1980, less than a year after our visit, the strongest earthquake in recorded Azores history, 7 on the Richter scale, shook Terceira, São Jorge and Graciosa. Back in 1757 a major quake killed a thousand people. This one, more merciful, killed seventy.

Fenton Wheeler, an Associated Press correspondent, recalling the disaster, says the quake rolled from its epicenter in the sea and across Terceira, “knocking down dairy cows, destroying 80 percent of the churches and tumbling from pharmacy shelves the medicines that would be needed later.” In the Terceira town of Doze Ribeiras (Twelve Little Rivers), near the epicenter, 261 of the 265 houses were reported wrecked or damaged. The rebuilding is slow and often primitive: water for cement must be carried by hand or on the back of a donkey, elderly women struggle with fifty-pound stones. Scores of buildings in Terceira’s capital, Angra do He-
roismo, are still propped up with timbers, awaiting reconstruction. The mayor of Angra told Wheeler: "Tourism is good and we have a beautiful geography to offer, but the best thing we can show now is our human landscape, our way of life."

Angra do Heroismo (Bay of Heroism) on Terceira Island is a world of loud birds, lavish flowers. It takes a whole morning to explore the public gardens, right outside our hotel. The azaleas and hydrangeas for which the Azores are famous are not out yet in March. But who cares, when there are all those snapdragons, daisies, salvias, and lilies?

Angra is said to be the oldest town in the Azores, founded in 1534. But a traveler we meet on the inter-island ferry tells us that Terceira got its name because it was the third of the Azores to be discovered, after San Miguel and Santa Maria, to the south. And Santa Maria boasts the first church built in the Azores, "connected," the tourist literature tells you, with Christopher Columbus. The Azores were probably discovered in the mid-fourteenth century by Portuguese navigators, or Genoese in the service of Portugal. They were then rediscovered, so the accounts go, by ships of Prince Henry the Navigator, in the fifteenth century.

In the farmlands of the community of Biscoitos, on Terceira, they mulch the grapevines with chunks of lava. It makes us think of Lanzarote in the Canary Islands, except that this is much coarser mulch. We have a conversation, at the public water faucet that serves a handful of farmhouses, with a vine grower who once spent three years in California.

Ponta Delgada on San Miguel: mosaic sidewalks, all kinds of black and white patterns—stripes, circles, lozenges, ears of corn, pineapples, crests. Here we find our all-time favorite hotel, the San Pedro. Open fires, a grandfather clock, furniture polished and gleaming, a beamed taproom, a dining room full of linens and waiters, a delicious five-course dinner for six dollars.

The resort town of Furnas on San Miguel lies in the fertile crater of an extinct volcano and provides more evidence that the earth is still not entirely at rest—natural hot springs. The way to the springs? Five Chinese sailors in a mini-car offer us a lift. There are thermal and mineral waters, geysers, medicinal mud; and a comfortable hotel and a park full of luxurious vegetation—fern trees, acacias, bamboos, cedar, palms, araucarias, hydrangeas, azaleas.

The Magdalen Islands

If people don't know just where the Azores are, they haven't even heard of the Magdalen Islands. They are north of Nova Scotia in the Gulf of St. Lawrence—nine of them with associated islets. They are mainly beaches and sand dunes, with a road down the middle, and causeways connecting many of them. The beaches are scattered with driftwood and sand dollars but not with people. Yet people do come here. We find proof, or at least evidence: at one beach, on a picnic table, half a set of false teeth.

On the Magdalens the French is quite distinctive. Even the Québécois, who fly up
for a brief visit, complain that they cannot understand what the Madelinots are saying. Perhaps the Christian Brother Marie-Victorin, in his affectionate account of a visit Chez les Madelinots in the first half of this century, has the explanation. He traces the Madelinot French to the Acadians of Grand-Pré, and from there to the language of France during the “Grand Siècle,” the seventeenth century.

Jacques Cartier discovered the Magdalen Islands in the sixteenth century, and they were largely settled later by the Acadians, driven out of other regions by the English: Brother Marie-Victorin calls the Madelinots “living proof of one of the three or four great crimes of history.” Later the English themselves turned up in the Magdalen; at one point, the islands were the property of Sir Isaac Coffin. And today, if you want a respite from the Madelinot French, you can take the boat to Île d’Entrée and hear nothing but English. There are also English enclaves on some of the other islands, including a community named Old Harry.

There are various tourist sights on the Magdalen—a church shaped like a ship, confessional like bulkheads with portholes in them; the marine museum, with a barrel in which the islanders once floated out the mail when the cable to the mainland broke and the boat did not get through. The barrel ended up in Nova Scotia. The little tour bus drives us right by one tourist attraction, an experimental wind-driven power station. The wind blew it down as soon as it was opened. It lies decapitated beside the road, like a dead windmill.

The Greek Islands

Yes, Rhodes is as beautiful and interesting as everyone says it is. We swim in the bright sea a few blocks from our hotel, we dangle from our fingers the gold chains that they really do make on Rhodes. The sounds we hear as we cross the moat into the Old Town are the Rhodes deer, down in the moat, munching.

On Crete the sound effect is provided by locusts, as we share the past with the Minoans at Knossos, 1500 B.C. We are reminded that we’re transient too: a funeral procession is going up a hill, three acolytes carrying the cross and vessels before a black and silver, multi-windowed hearse.

In Heraklion a reminder that life goes on: a wedding is about to take place in the cathedral. The bride arrives and walks across the square. The wedding guests are met; but there’s a wail amid this merry din. A little girl, four or five, dressed in bright red, simply isn’t in the mood for a wedding. Neither her parents nor aunts, uncles and little cousins can persuade her. At last sight she and her parents are still sitting in their car in front of the cathedral.

On Nisyros, at six-thirty in the morning, the town turns out to see a young man off on the “Miaoulis”. The priests are there, and the nuns; the women, many of them in headdresses and long skirts; the men and boys. The young man carries a farewell bunch of withering flowers as he comes aboard.

Nisyros, Rhodes, Astypalea and the other islands in their group, the Dodecanese, are just off the Turkish coast. In some places you can see Turkey in the background. Before Greece and Turkey came to blows over Cyprus in the 1970’s, you could take a ferry to the Turkish shore. But no more. And don’t ask for Turkish coffee. Nevertheless, you still have the feeling of another country—in fact, another continent—close at hand. The Dodecanese, in this century alone, have belonged to Turkey and Italy as well as to Greece. They were also garrisoned by German troops when Italy surrendered in World War II. Greece got them in the postwar settlements. On Symi, on a tumbledown building, we see a plaque identifying it as the spot where the surrender of the Dodecanese to the Allies was signed on 8 May 1945.

On the island of Naxos, in the Cyclades, Ariadne wept when Theseus departed. You can see the legendary fountain of her tears in the harbor—turbulent, swirling tears. In the hill town of Filoti the mayor and other townsfolk have turned out to welcome a middle-aged clothing-store owner from Long Island, New York—a son of a native son. For the rest of the day we are swept up in a Greek fiesta. Nonstop eating, dancing, singing. Alberta has never tasted fresh figs? That will never do. An elderly uncle who has a farm is immediately dispatched to get some. Alberta is just recovering from the quirks of Cretan cuisine, but what do you do when an old man walks five miles in the sun to bring you fresh figs? You eat them.

Malta

Ancient, medieval, and modern history piled on top of one another, from the cart tracks of neolithic Sicilian farmers to the anti-aircraft gun emplacements of World War II. Malta and its British defenders—only sixty miles away from Mussolini’s Sicily—are said to have absorbed more than three thousand
air raids during the war, a heroism that earned for Malta the George Cross of Britain. John Best, in his guide to Malta, says 30,000 buildings were destroyed. The site of the Baroque opera house in the capital city of Valletta is now a parking lot, but the Grand Master’s Palace still seats Parliament, and Queen Victoria’s skirts still billow in front of the national library.

Festive lights were going up all over Valletta when we were there, to celebrate the anniversary of the closing of the British naval base. It had stayed, under a lease agreement, even after Malta became a republic in 1974. The British presence in Malta had had its beginning more than 150 years before, when England helped the Maltese rebel successfully against brief French Napoleonic rule. Bonaparte had seized Malta from the Knights of St. John, who had received the islands—the country of Malta consists of the islands of Malta proper, Gozo, and Comino—from Charles V of Spain in the sixteenth century. That’s how Malta’s history goes, back through the Normans, who won it from Moslem Sicily, which had seized it from the Byzantines, who had succeeded the Romans, who had supplanted the Carthaginians, who had followed the Phoenicians, back and back through the Bronze and Copper Ages to neolithic Sicilian farmers of about 4000 B.C.

In short, almost everybody has wanted Malta. Its location in the Mediterranean, near Sicily and about 200 miles from North Africa, was especially crucial before ships were able to travel great distances without refueling, but Malta’s location is still strategic. The Soviet Union and Malta, under Premier Dom Mintoff, signed an agreement not long ago by which Moscow formally recognizes Maltese neutrality in return for the right to store up to 200,000 tons of fuel in Malta each year for the Soviet merchant fleet in the Meditteranean. When Malta holds an election, the big powers watch. Will Socialist Mintoff’s Labor Party win again? Or will the Nationalist Party of Edward Fenech Adami, who pledges to follow a pro-European, pro-Western course? In December, 1981, Mintoff’s party won.

In Valletta the young people speak proudly of independence, but some of the older ones miss the British. One man tells us that he doesn’t like the Libyans who fly over for the weekend, because they make passes at the Maltese women. But, he adds, Malta is so small it has to be friends with everyone. They grow the biggest cauliflowers you ever saw on Malta. They’re everywhere in the markets. But try to find one on the menu of a hotel or restaurant! As we chew our way through traditionally British carrots and cabbage, we imagine the Maltese, seated at their dinner tables in their houses of glowing, golden stone, eating mounds of white, fluffy cauliflower.

By night we sample the cultural life of Valletta: Molière’s *Le Bourgeois Gentilhomme* performed by a Maltese cast in English with an assumed French accent, in the blue and gold Manoel Theatre, one of the oldest theaters in Europe, dating from the first half of the eighteenth century.

Which brings us to the language, Malti. John Best, in his *Holiday Guide to the Maltese Islands*, says that it probably began as a Punic dialect, but then came the Arabs; to this day it retains a Semitic structure and a large majority of words of Arabic origin. But it also has absorbed Norman-Sicilian, Italian, Spanish and English words. Its written form, with a modified Roman alphabet, dates only from this century. Anyone who has heard Arabic spoken may be reminded of it when he hears the Maltese talk. The place names—Mdina, Mqabba, Xewkija, Dghajjes—make us think of the way Arabic words are reproduced in English. We can easily say “Thank you” in Maltese: grazzi. But how about trying to say “please” (jekk joghbok, pronounced “yek yobbock”)? Forget it. We talk English; for the British naval base may have gone, but the
Maltese still learn English and indeed tell us proudly how many other languages they learn—French, Italian, German... Living in such an international crossroads, they have to.

We walk the cliffs of Dingli and down their steep, green sides, past cave houses and among small farms basking in the sun. We visit St. Paul's Bay, where the apostle Paul is said to have been shipwrecked when the Alexandrian wheat ship in which he and Luke were traveling was caught in a storm. We visit catacombs from Roman times. We have long talks with the sixteen-year-old Maltese girl who helps her father and grandfather run our hotel. Malta is more history and sensations and sights in less space than we have ever encountered.

So these are our islands. And what have they done with us, after we have thrown ourselves on their mercy? They have roused all our senses: the textures of sand, pebbles and rocks on countless beaches; the taste of fresh-caught, fresh-cooked fish under a thatched roof; the sounds and smells of inter-island boats; sunrise over a pier crowded with sheep and cattle; the golden glow of Mediterranean sun; cold, wet shoes.

We have enjoyed walking streets at night without fear of violence, leaving our baggage on the sidewalk and finding it when we returned, even having a bartender run after us with a wad of cash we had dropped in his bar the night before; we hear that there was no looting, even of unprotected shops, after the 1980 earthquake in the Azores. We cherish countless memories of kindness, courtesy, and hospitality, like the rosy-cheeked woman on the bus who guided her year-old child's hand toward us to offer us a cookie, and the elderly gentleman who insisted on giving us his seat in a crowded tavern we had entered to escape a rainstorm, and the passerby who spoke no English, but reset his watch to show us exactly when the bus left. And we have revelled in the smallness and completeness of these worlds, which give us a feeling of being able to cope that eludes us so often in Cleveland and New York.

We know that, in our privileged role of visitors, we have not lived the lives of the islanders. We know that washing clothes in a stream is more charming to observe than to practice, and that the floors of a small hotel shine the way they do because someone gets down on hands and knees to polish them. All that sun in the Canary Islands must look different to the farmer who has to pay 50 to 100 pesetas a cubic meter for water. The swarms of half-starved cats around our outdoor restaurant tables remind us how harsh life still can be—and not only for cats.

We know that the islands are beginning to get complicated by intrusions from bigger worlds outside. Island populations are dropping as families seek better jobs on the mainland. Canary Islanders are worried about Spain's entry into the Common Market and NATO. North Sea oil has widened Shetland's picturesque roads. We're advised not to wear gold jewelry on the streets of Valletta, and on Guernsey they're beginning to lock the doors at night. Plastic containers litter Greek beaches, and motorcycles break the golden silence of Ponta Delgada.

So islands are not paradise. But then, we're not obliged to judge them. We are visitors, Boswell quotes Johnson during their trip to the Hebrides: "It would require great resignation to live in one of these islands."

To which Boswell replies: "I don't know, Sir: I have felt myself at times in a state of almost mere physical existence, satisfied to eat, drink, and sleep, and walk about, and enjoy my own thoughts; and I can figure a continuation of this. To which Johnson replies: "Ay, Sir: but if you were shut up here, your own thoughts would torment you: you would think of Edinburgh, or of London, and that you could not be there."

We have felt as Boswell does but tend to agree with Johnson, too. We haven't decided to spend the rest of our lives on any of our islands. We just dropped by to get acquainted. And they have treated us better than our fondest expectations.
Alberta Tucker Turner

A SHEAF OF ISLAND POEMS

BRACE

Take an island so small that when you look up
sea's every thing and every where.
Gulls cruise the edges, feet tucked up,
clams burrow and squirt,
your feet soak.

You turn and climb. Sand slurs a track,
stacked holes are cities of rabbits,
splashed stones guard eggs, and someone has wrecked
a small plane.

Inland and up — through alder and tamped bracken.
Someone is wintering sheep here. They scatter,
then bunch and wait. You climb,
they bolt.

Rock now and lichen, then a pool
rimmed with reeds, snail shells, mouse traces.
You stop.

But wind drags past you, towing sand, towing salt,
your hair, your coat. You look up,
and there's the sea.

OUTER HEBRIDES

"Last year we got
the electricity . . . Did you find
the toilet paper? . . . No, the walls without windows
were always for cattle."

Wet socks? Dried fish? Rabbit
skins — and strawberries
powdered with sand.
A fighter plane?
No seaweed on it.

"I wish my husband
could find work here . . . The MacNeil's
buried in the castle. I wouldn't want
to live alone with my husband
like that."
Hollow grasses,  
barn of pebbles.  
Hens, where are your nests?

“The wee girl has sore hands . . . .  
The nurse gave us this . . . .  What  
do you think?”

Wool on fences,  
beak and feathers . . .

“If the cattle boat makes it,  
the mail boat feels  
it has to . . . . Cornflakes or  
porridge?

Clouds grazing,  
small, sticky  
droppings . . .

“Lovely day!”

Sharp hooves . . .

“No, she’s a pet;  
her leg’s always been like that.”

SHETLAND

I
Stone tunnel where a stone-age man  
crouched from stone bed to stone hearth  
Stone  
stack where a bishop laird stored his bells his cannons  
flutes and casks  
Seven long concrete sheds  
where cattle stand from calf to beef  
their dung on a slide-out tray  
their hay  
in a moving trough

II
In Shetland they don’t name the dead  
say “her that were tint  
them that’s awa  
the bairn I wanted”

When gravediggers find a lamb  
in the churchyard a child will die  
The lamb will have three legs  
When a small pig runs begging  
they dig where it wants and find  
a child secretly buried
The beds they die on are burned
If smoke from the "leek straw"
blows over a house a child will sicken

When they build a church
they bury a live
lamb under it

III
The cock crowed at midnight
but a rainbow arched over the crib

Crossed signals
Have I rocked an empty cradle
carried fire out of the house?

The priest would say "God's will"
The doctor "Keep warm"
They do what they can

I must borrow a black cock
take the knife and the bible to bed
and talk to this child

CHANNEL ISLANDS: STEPS TO FRANCE

In the castle William Prynne
scratches a shred of ear and plays
cards with his jailor.
At the port Victor Hugo
sets bright platters in his ceiling,
peers through a pane in his study floor,
and sleeps in the closet.
Before the toy cathedral,
made of Wedgwood chips and
bits of mirror, buses genuflect.
At the breeding zoo a cheetah, born here,
lifts her head, closes her eyes and gazes.
In a hospital underground
stumps of German soliders drip.

The hydrofoil to France has broken down
and wallows like an ordinary ship.
FOUR CANARY ISLAND POEMS

I
Why is every shop window dressed in white baby clothes
and where there’s no water, all the roofs fly sheets?
Cars wait for old canes, and fish
fry with their heads on.
A trawler dips behind a wave
till only the mast tips show,
a sailor points, laughing, “There is no
danger.”
A woman vomits all the way
from Tenerife.
Chew a cinder, taste garlic.

II
Lava ends in a brown kid
so new I heard its first bleat
(the mother curved her horns around it),
Lava — like rusty furnace grates
like cinders out of our old furnace.
Just touched it and I bled.
Lava breeds
lichen
then cactus,
terraces, a cow on each ledge,
then two cows ploughing
then widows with hooded heads
and a brown kid.

III
Caves, with doors and washlines
Sun
Crevices of black sand, slow surf with
paper cups
Sun
Dry dories in a ring
adobe church, plane tree
doors and windows shut against
sun
Six women dry on a wall,
six women shade a low wall.

IV
“We’ve lived in Kenya. Tried Jamaica.
Tried Bangkok. Came for peace.”
(bone scene mackerel spine
camels ploughing vines in pits)
Only to live because someone started
(worm shells nautilus
cinder sponge salt bed)
"Christ's in the storeroom. They're wiping the church."

GREECE: A SEARCH FOR SALT

I
Came for goats
and orange peel under a cannon,
and to ask if a bald hill could still green grapes
and if any olive trees remembered Christ.
Came to taste if the wine-dark sea
was salt.

II
Cretan woman milks a goat,
rides an ass sideways, legs banging the ribs,
scrubs clothes in a wheelbarrow,
dries grapes on the roof,
puts a child on the bus, kisses it, gets off.
In September cornstalks and sunflower heads dry.
She doesn't cut them.
She crosses herself four times when she passes a church,
loads a donkey with firewood, melons, her husband,
grins and strides ahead
or strides behind.

III
We older women
squat on the quay on folded blankets
and wrap our heads in black to just above the chin.
At Amorgos we are lifted on deck
in our own chair.
At Kos our bundle flies open and our
long stiff drawers fly out.
We hold a bag of pears: three each for the ladies,
four, six till they spill.
Two drachmas? Four? We throw the money back.
At the airport, our mustache is gray.
When a child cries, we look past.
IV
Push a rock up out of the sea
four hundred feet six hundred.
Whiten let crumble.

When the gods change, ring that rock with teeth,
rake that sea with stone shot,
mound larger stones to hutch the new god.
Lichen wait.

When the gods change again, allow ants
to bring rugs and lace and cylindrical beads,
breed mules to carry their fat grubs up.
Shore the first temple (these grubs are full of milk),
board up weak arches, pile cannonballs out of reach.
Wait.
The gods are not changing yet.
You may lick that rich melt.

MALTA

A dog barks off a roof
A cat full of kittens glides under a cart
A boat on stilts with eyes on either side of its prow
lowers its lashes

A mason in muddy trousers and torn shirt
with a handkerchief knotted over his hair
knocks the cue ball into the pocket
and drains his beer and goes back to work

A child reaches to touch a bird
trapped in a wicker net on a fence post
and a farmer comes out of his hut and shakes his fist

A fowler leans his rifle and squats
in an empty gun emplacement
till the rain stops

And a woman in black shaped like a mole
skips down the street "It's spring
it's spring why shouldn't I sing"
she grates
Homo sum. Humani nihil a me alienum puto.
—Terence

Paleolithic man painted impressionistic bison on walls and ceilings deep within the caves he never lived in, and scratched the silhouettes of horses onto rocks — following neither the artist’s nor the graffitist’s impulse, we now believe, but carrying out the dark rituals of hunting peoples. Not the graffito but the icon before an altar is their functional equivalent in our own times. But now there are surely tens of thousands of living graffitists for each religious artist, and the rock shelters in which the stone-age hunters lived must have shown their share of this more ephemeral sort of epigraphy.

We know, at any rate, that the graffitic impulse is at least two millennia old. The volcanic ash that preserved Pompeii and Herculanum in gritty aspic also preserved the graffiti on those Roman walls, precious documents of daily life and attitudes that show the ancient world as remarkably akin to our own. The legends “Fortunatus futuet Anthusa[m],” “Festus hic futuit com sodalibus,” “properly” translated, might well be found in men’s-room stalls today.

Though the impulse to write on public walls is doubtless ageless, the much different impulse to study these “scrawls of the wild,” as Norton Mockridge called them, is relatively modern. To be sure, occasional obscure writers have in the distant past noticed writings on toilet walls, but the first real scholarly study of them was made only in 1928, when the young lexicographer Allen Walker Read collected a large number of these *latrinalia* across the northwestern United States and Canada in order to study folk language. His monograph was unpublishable in the United States, refused even in Germany, appeared only in a limited edition in Paris in 1935, and remained largely unknown to the scholarly world until attitudes toward things sexual began to change after World War II. Alfred Kinsey’s Institute for Sex Research commissioned a fairly extensive collection of restroom graffiti in the late 1940s that provided material for two pages of his *Sexual Behavior of the Human Female* (1953), though Kinsey’s bibliographer Gershon Legman probably knew Read’s work; Kinsey makes no reference to it.

In the late 1960s — a time when sexual mores had undergone still more radical changes — psychologists and anthropologists began to discover what the classical archaeologists had long known: graffiti are an easily accessible source of evidence concerning human phenomena, especially concerning sexual and scatological matters whose nature makes them difficult to study. In particular, in contrast to the interview/questionnaire techniques used by Kinsey.
and later investigators, graffiti are a "non-reactive measure": that is, since they are not produced in the context of an investigation, the act of studying them doesn't (at least not immediately) change their nature. It is the 1970s, however, that seem to be the golden age of graffiti. In addition to the traditional latrinalia, several "new" sorts of graffiti emerged, literally, into the light of day. Political graffiti began to appear on walls and bridge abutments (as well as their more formalized offshoot, the commercially produced bumper sticker),

public-transit graffiti began to flourish (those on the New York subways indeed became a kind of long-running media event, spinning off an art exhibit, a ballet set, and a coffee table book),

and — perhaps because of the media attention — sociologists began to observe their use as gang "turf markers" in major cities.

It has become clear that there are two fundamental types of graffiti: public and private. Public graffiti, written large on cliffs, walls, bridges, buses and subways, are brief cries proclaiming the identity and existence of a single ego, different in form but not spirit from the "pasó por aquí" etched onto a New Mexican rock four centuries ago by one of Coronado's soldiers. Private graffiti, written small on restroom walls and in dark corners of waiting rooms and transit stations, are a more complex form of communication, as we shall see.

What set off my own interest in private graffiti was an article that appeared in the Cleveland State University student newspaper, The Cauldron, early in 1977. Across the front page was the ungrammatical headline "Graffiti takes on racial overtones," and one student quoted by the author summarized the article's argument: the increase in racially-oriented graffiti, the student claimed, was "reaching such proportions that it's cause for alarm." At the time I had been teaching folklore courses at Cleveland State University for about five years; though I had occasionally touched on graffiti as a folkloric genre, I had made no serious study of the phenomenon. Here, however, was a pedagogical prize: an hypothesis relating to the students' own environment that was testable by the methods of folklore research. I immediately formulated my own graffiti collection project, enlisted the aid of one of the young women in the class to undertake a parallel collection of women's room graffiti, and began to study in earnest what others had written about the subject.

My intention was modest: to undertake a small project for a month or so that would provide my students with a model of the formulation and testing of an hypothesis in folkloristics. But graffiti have a strange fascination. My project is still incomplete — indeed, the more graffiti I collect the less complete it seems — but I can at least report some interim results.

Let me begin with some numbers. Though all of us are exposed to restroom graffiti with fair frequency, few of us take the trouble really to observe them: numbers will help to focus our attention. The analyzed portion of my collection consists of 347 men's-room and 108 women's-room graffiti, collected in various locations around Cleveland State University. The latter set comes from 45 women's restrooms; only 14 actually contained graffiti, and nearly half of the 108 came from only two rooms in an administrative/residential building. The men's rooms were, as previous studies had led me to expect, more productive: the 347 graffiti came from only 36 stalls in 20 restrooms, of which 25 contained at least some graffiti. Again, however, the range of variation was extremely wide: 227 of the graffiti
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came from only six of the stalls. In one stall whose walls were recorded over some four weeks, graffiti accumulated at an average rate of a little over two per day.

The differences between men's and women's graffiti lie not only in numbers. The women's-room collection falls naturally (according to the student who did the collecting) into seven categories: personal names (33%), political-philosophical (25%), puppy-love (18%), drawings (8%), humor (5%), sexual (5%), and miscellaneous (6%). In the men's-room collection, the category "puppy love" is entirely lacking, and "names" constitute only 7% of the collection. Only partly because of its larger size, the men's collection can be subdivided in a bit more detail. Its eleven categories are: metagraffiti (19% — "graffiti about graffiti," a type to which we shall return), genres (17%), sexual (16%), philosophical (10%), scatological (9%), names (7%), racial (6%), music (4%), Cleveland State University (3%), politics (2%), and miscellaneous (6%).

It is difficult to relate these data in any sophisticated way to earlier graffiti studies, none of which make clear either how their material was collected or what basis was used for classification. Kinsey's data are in any case too old to be of much use for comparative purposes; sexual mores have, as noted earlier, changed radically in those thirty years. In a more recent study of restroom graffiti in four midwestern colleges, however, Terrance Stocker and his colleagues provided some comparable data. At Cleveland State University they found, in 1972, graffiti showing a male-female difference of greater than 4% in the following categories: love statement (M = male, 0%; F = female, 19%), humor of elimination (M 11%, F 0%), philosophical (M 11%, F 3%), social statement (M 2%, F 10%), word (M 3%, F 10%), and other humor (M 9%, F 2%). Our study and theirs correspond in the "love statement = puppy love" category; but it is hard to know whether the heavy emphasis on "names" in our collection is a real contrast with the lack of that category in theirs, or reflects only a difference in methods of classification.

What about the question that had originally caught my attention? Most recent studies of graffiti have touched either directly or indirectly on racial-ethnic relationships, but they have rarely considered in any detail the "ethnic slur" sort of graffito supposedly on the increase at my university in 1977. Only Stocker and his colleagues use "racist" as an explicit category, and they do so only because "racist graffiti were so frequent" at Southern Illinois University in 1970. Previous studies, they pointed out, had shown that "there was a relatively greater incidence of Semite-Gentile graffiti" in four-year colleges and professional schools, while in trade schools and junior colleges "there was a higher proportion of Negro-White racial inscriptions." Their own collection of 2219 graffiti from men's and women's restrooms at three midwestern universities showed some male-female differences: except for Southern Illinois University, there were about four times as many racist graffiti in women's as in men's restrooms.

At Cleveland State University we found no racial graffiti in women's restrooms, but in the men's rooms racial-ethnic graffiti made up nearly 11% of the total. Since Stocker and his colleagues attributed the high percentage of racist graffiti at Southern Illinois University to the relatively high percentage of Black students at that university and to the "heavy racial strife" in nearby Cairo, it might seem as if the Cauldron writer had a point: racist graffiti at Cleveland State University might indeed be a "nonreactive measure" of an underlying problem.
Statistics, however, are meaningful only in context, and some reservations must be made. First of all, our "racial-ethnic" category includes all graffiti that refer in any way to ethnic identity, while the subheadings of the "racist" category in Stocker et al. (racist elimination, racist hostile, racist derogatory, racist sexual) indicate a much more restrictive category. Secondly, our "racial-ethnic" category includes numerous graffiti attacking racism. After one particularly obscene anti-racist graffito, another hand commented:

How would the world be if everyone looked the same?

To that a third person added:

"We would base our judgment of others on things rather than race or sex. But there would still be prejudice. The Capitalists just love it when hankies and niggers hate each other—then we don't fight them."

By no means do all such comments proceed from political biases. After one fairly obscene anti-racist graffito, another hand commented, positively and directly:

"You got a good point there, buddy."

In fact, our "racial-ethnic" collection is about equally balanced among anti-black, anti-white, and anti-racist graffiti. Although we have no data for Cleveland State University in the early 1970s, my recollection of observations suggests that there is after all little "cause for alarm," and no documentable increase in racist graffiti; to the contrary, virulent racist comments seem to be declining. What is increasing is the number of graffiti comments on racist graffiti. Nearly all of our "racial-ethnic" graffiti came from only three people not only write graffiti, they read them.

That point brings me back to the subtitle of this essay: graffiti as communication. As I mentioned above, the largest single category in our collection is "metagraffiti"—"graffiti about graffiti." It was also the largest category in the massive collection made by Stocker and his colleagues ("response"), though they list it last with the brief comment that it is the only one of their categories overlapping with others. For me, however, "metagraffiti" is the category that tells us most about the basic nature of the wall-writing impulse.

A survey of our "metagraffiti" collection suggests a number of possible subdivisions. There are comments on the nature of graffiti writers, such as the one which must surely be one of the most widespread of graffiti—the verse beginning "People who write upon these walls/roll their..." A less traditional comment, which I reproduce exactly as found:

anybody who writes on walls ought not to graduate in as an English major.

There are responses to other graffiti which can be either evaluative (such as "This person ought to be a Typist, Margins are so Well Planned Out"—"Never in the history of altruistic rhetoric has such banality been more unapplicable"—"This wall would get gonged on the Gong Show"—"LEARN HOW TO SPELL"—"Shame, shame, we used to get some high-classed graffiti [sic] around here"—"This is perverted") or simply commentary, like the anti-racist graffito cited above. There are instigation graffiti whose main message is "write more!" Here is an extended example:

OK, Music Majors, you're doing a fine job with your intelligent graffiti, keep up the good work and by next Fall Quarter I expect all 3 of these walls to be crammed full of graffiti. Signed Prof. Moriarty, 4.22-77. P.S. Don't forget the opposite wall now!

All these examples, however, also show that any attempt to subdivide the "metagraffiti" category will encounter serious problems of overlap. The last example I'll quote here begins as an interesting observation on graffiti writers and continues with three successive responses:

(1) My observations tell me that 100% of the people, to date, who have used this stall are all: Right Handed.22
(2) WRONGO BISON BREATH
(3) wrong again — Bison Breath was left-handed
(4) hardly

The importance of the "metagraffiti" category lies in the evidence it provides that people not only write graffiti, they read them—that graffiti are in fact communicative acts. Indeed, Kinsey argued long ago that most graffiti in men's rooms represented a very specific form of communicative act: invitations to engage in homosexual intercourse. Nowadays, however, such invitations form a very small part of the total spectrum of rest-room graffiti, and even the few examples I've given above suggest that a much more complex form of communication is involved. Each graffito is an anonymous communication that the writer can be sure will be read by someone who cannot identify the writer, and each one has a fairly high probability of being
responded to by someone equally anonymous. Journalists have compared the ornamented names of public graffiti on bridges, walls, and subways to "voices crying out in the wilderness" — but I believe the proper Biblical parallel for restroom graffiti is the Psalmist’s "Out of the depths I cry unto thee, O Lord!" They allow the communication of feelings and ideas, some of which would be difficult to manage in everyday conversation, in a way that doesn't threaten the security of the graffiti writer. If, from the scholar’s viewpoint, graffiti are "nonreactive measures" of group attitudes, they are also, in a somewhat different sense of the word, "nonreactive" acts of communication.

The phenomenon of restroom graffiti, especially as manifested in chains of "metagraffiti," is in fact remarkably like the phenomenon of CB radio, which also allows for unrestricted communication without accountability. An hour or two spent with a CB receiver will demonstrate as well — though no one has, to my knowledge, made any kind of systematic survey — that there is a substantial overlap in themes and motifs between these two types of anonymous communication. Even the "handles," the nicknames beloved of CB-ers, have a parallel in the use of "code names" in graffiti chains, like the "Prof. Moriarty" example cited above.

Any intensive study of graffiti as communication is, of course, hindered by the fact that we normally have only a record of the act itself and cannot identify either initiator or audience — though of course all of us are, at one time or another, part of that audience. There is, however, one special audience that can be identified: the custodians who clean the restrooms. In an effort to gain at least some "audience" information, I created a questionnaire which, with the cooperation of the Physical Plant administration at Cleveland State University, was sent to some 100 of the custodians who clean the restrooms from which our collections had come.

From the responses to these questionnaires one learns that most custodians are responsible only for a single floor of a building, and therefore are seldom responsible for cleaning more than two or three restrooms — and most of them thus see the same stalls over and over again. But they "see" them with vastly differing frequency: 35% of the custodians responding said they cleaned restroom walls more than once a week, while another 35% admitted cleaning them less often than once a month. Thus the tremendous difference in quantity of graffiti that one observes from restroom to restroom is in part due to custodial practices.

In order to learn how perception and reality might correlate, we asked the custodians to describe the types of graffiti they had observed. Their responses supported our conclusion that the number of graffiti in men’s rooms is nearly triple that in women’s rooms. There is less correlation between what they perceive and what our collections showed in terms of themes. Though one custodian commented accurately that “women write more on a message order, regarding sex, their personal lives, etc.,” their reports generally show curious differences from our data. For the men’s rooms their comments stressed drawings and antiblack graffiti far more than is supported by our data, and for the women’s rooms they totally ignored the names category.

Indeed, it seems that what custodians remember of graffiti is what they find offensive. The attitudes they expressed toward graffiti formed the most interesting part of their responses. Few of them found graffiti interesting or funny; the most frequent reaction is that “They make me angry” or — perhaps a reason for the anger — "They make me work harder." Only two custodians made comments indicating some attempt to understand the graffiti-writing impulse. “Human energies will always ‘vent’ themselves in some manner” was one expression of general resignation, while another was more specific: "Each individual needs an emotional outlet. If he writes on the walls maybe he won’t rape an innocent girl."

Most custodians consider graffiti not only offensive, but symptomatic of moral decline. “Students do as they please,” writes one, “no set rules. We take the writing off the walls today, they write it back on tomorrow.” Another expresses the vain hope “I wish these young men and women would grow up and act like college students” — but others are sharper: “I have always thought higher learning meant class. You find more class in the ghetto," or “I think the person who is doing this is sick in the mind.” They know whom to blame for the decline: “If the mothers and fathers were taught the things I was, this wrong-doing would never happen. I do not blame the children. The parents should be punished.” And they are equally sure that students are mainly responsible for graffiti. One, to be sure, raises the tentative question: “Sometimes I wonder if it’s just the students...” but in fact the evidence of our collection does show clearly that graffiti density in areas of high student use is far
greater than in areas where students are fewer.

No study of graffiti can ever be “concluded.” Not only is one’s sample of the data always painfully small, but graffiti — like all aspects of urban folklore — are constantly changing: what may seem true on the basis of this year’s collection may prove very different five years from now. All of the “conclusions” expressed above are necessarily tentative, and our collection has raised as many questions as it has answered.

One question is about the way graffiti come into being. Our study suggests that they are a self-generating phenomenon. So long as a restroom wall bears only one or two “standard” scribbles, it is unlikely to accumulate many more before the inevitable but slow cycle of “washing the walls” recurs. But when a particular graffito has some quality which arouses a response, a wall acquires generative capacity: sequences of graffiti on particular subjects begin to grow, and the existence on a wall of one sequence seems to lead to the initiation of other sequences.

There are many cases, however, where nothing in the content of the graffiti on a wall seems to explain their quantity. Such cases make me wonder if quantity alone is generative — if graffiti on a wall reach a definable “critical mass” of accumulation after which the rate of accumulation suddenly increases explosively — but to answer that question would require a different sort of study than the one we’ve undertaken so far.

A number of questions relate to male-female differences. The high frequency of “love-statement” and personal-name graffiti in women’s restrooms at Cleveland State University and my observations of significant long-term changes in men’s-room graffiti both suggest that the average male student at our university is becoming liberalized more rapidly than the female, that our women students remain largely conservative in their outlooks and attitudes. That would not be surprising in a university population with a heavily working-class ethnic background, where the Cleveland State University student is often the first person in his or her family to attend a university, and where male dominance and female submissiveness remain fundamental to family relationships. But the data in hand are too limited to do more than hint at such generalizations.

Let me note in conclusion that what one learns from the formal study of graffiti comes not only from the evidence collected. My attempt to use custodians as sources of information led to letters of protest to our University president and board of trustees, and to a local newspaper columnist. His resulting column brought me a kind of local fame, or perhaps notoriety, seldom “enjoyed” by people in the academic world: invitations to speak to local groups, further newspapers articles, appearances on television, sarcastic comments from a senior administrator. Graffiti in situ may be a “nonreactive measure” — but when brought out into public view, they cause strong reactions indeed. Their content arouses all our inherited social taboos, and that can blind us to their value as an object of inquiry. Yet they are honest human documents; the words of Terence’s character cited at the outset remind us that they are, after all, a fit subject of study for a humanist.

NOTES

1 Publius Terentius Afer, Roman playwright. The words are from his comedy The Self-Tormentor, written in 163 B.C. In H.T. Riley’s translation: “I am a man, and nothing that concerns a man do I deem a matter of indifference to me.”


DE PROFUNDIS: GRAFFITI AS COMMUNICATION

Corpus Inscriptionum Latinarum, ed. C. Zangemeister, vol. 4: Inscriptiones Parietariae Pompeianae, (Berlin, 1871), nos. 1230 and 3935. Translated more decorously than alliteratively, the first one means "Fortunatus made love to Anthusa" (the writer, like many modern graffitiists, is unsure of his grammar). The second one is ambiguous: it can mean either "Festus and his friends made love here" or "Festus made love with his friends here."


Gershon Legman, who now lives in semi-retirement at La Clé des Champs in the Maritime Alps, is the dean of erotic bibliographers. His two-volume collection of limericks (The Limerick [1964; rpt. New York: Bell, 1974], and The New Limerick [New York: Crown, 1977]) contains 3450 different limericks, fully annotated: and has Rationale of the Dirty Joke: An Analysis of Sexual Humor (First series, 1968; rpt. New York: Grove Press, 1971; and Second series, New York: Bell, 1975) is not only the one major study of that genre, but is itself a substantial collection. Curiously, he has never dealt more than casually with graffiti, though his The Horn Book: Studies in Erotic Folklore and Bibliography (New York: University Books, 1964) is the only broadly-focused study of erotic folklore yet published.

The term "nonreactive measure" seems to have been used first by Linda D. Rhyne and Leonard P. Ullmann, "Graffiti: a nonreactive measure?", Psychological Record, 22 (Spring 1972), 255-256, though Kinsey and others had in fact used graffiti in this way. The idea of a "nonreactive measure" is a representation in a psychological context of Werner Heisenberg's "uncertainty principle," first applied to attempts to locate subatomic particles.


There have been uncountable published references to this graffito, including a photograph by Ansel Adams, but perhaps none so evocative as Dorothy Pillsbury's little vignette "Passed by here," in her Adobe Doorways, (Albuquerque: University of New Mexico Press, 1953) pp. 157-162.


Susan Clerkin, "Women's restroom graffiti at CSU," unpublished paper, file number B-28 in the Cleveland Folklore Archive.

Kinsey's study (see note 7) of 331 female and 1048 male graffiti found (a) that "relatively few females . . . make wall inscriptions" (673), (b) that only 25% of the female inscriptions were erotic, contrasted to 86% of the male inscriptions, and (c) that only 11% of the female inscriptions were homosexual, contrasted to 75% of the male inscriptions. Since that study gives no information about methods of collection, it is difficult to determine its reliability.


Ibid.

It is a fact that most restroom graffiti are written on the wall to the right of a person seated on the toilet, and the changing angles of the writing show most graffiti to have been written by seated persons.


In spite of the fact that most of the custodians were Black, they were significantly more offended by sexual graffiti (34 comments) than they were by racist graffiti (7 comments); they did, however, seem to take more notice of racist graffiti than the actual presence of this category would justify.

Wendy Reich, Rosalie Buss, Ellen Fein and Terry Kurtz ("Notes on women's graffiti," *Journal of American Folklore*, 90 [April-June 1977], 188-191) note the problems of comparing male-female data in earlier scholarship and suggest that the content of female restroom graffiti is undergoing a radical change that parallels the feminist movement. Conversations I've had with female colleagues here and at other universities confirm this trend, as does a more recent collection in CSU women's rooms: see Ann Locasio, "Graffiti: a project with a difference," unpublished paper, file number 80-2 in the Cleveland Folklore Archive. I've not yet had time to complete a full analysis of Locasio's data.

Athena Tacha

"COMPLEXITY AND CONTRADICTION"

IN CONTEMPORARY SCULPTURE

This short essay was written at the close of the seventies as a reflection on some of the most interesting stylistic developments that occurred during the decade. As an artist I am involved in some of these developments and inevitably cannot be entirely objective. Therefore, in one sense the essay is a modest manifesto, concentrating on certain characteristics shared by a number of architectural sculptors. I asked those artists to speak for themselves; each sent me a photograph of a representative work with an accompanying statement explaining some of his or her main preoccupations. (Because Jackie Ferrara does not write about her work, I used a pertinent excerpt from an article on her.) I thank all the artists who contributed to this collaborative effort. At the editor’s request, I have added explanatory footnotes for the benefit of the general reader.

If one follows a mainstream of twentieth-century art — from Malevich, Mondrian and Brancusi, through Reinhardt, Newman and Rothko, to Judd, Morris and Stella — one could be justified in stating that modern art, like modern architecture, has been based largely on a process of reduction. Mies van der Rohe’s principle of “less is more” (which was also applied to music and dance of the last decades) naturally led the visual arts to Minimalism and ultimately to Conceptualism, a liberating movement which allowed the artist to dispense even with form. However, such an austere reduction of means, paired with an unremitting analysis of the nature of art, was bound to lead to a dead end. Like several younger architects who have started “throwing stones at the glass box,” many artists who emerged in the 70’s have reacted (consciously or not) to the reductive premises of the 60’s and have begun to agree with Robert Venturi that “more is more and less is a bore.” This reaction to Minimal form and to the Systemic way of organizing which followed it has manifested itself in the visual arts of the 70’s in many ways: through formal complexity, compositional irrationality, contradictions in space perception, etc. However, such tendencies have been slow to surface in the awareness of many critics who are baffled by the present stylistic diversity and are still imbued by the Minimal vision. In fact, even some of the best artists of today (e.g., sculptors as different from each other as Robert Irwin, Richard Serra, Jackie Winsor, and Loren Madsen) are still using the Minimal idiom.

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Two predominant formal characteristics of Minimal work were rectangularity (what Bob Morris called the "post-and-lintel" system) and uniform repetition. Their equal importance for Systemic modes of composing contributed to the dominant role of the grid throughout the 60's. Another leading trend of the late 60's, Process Art, was based on earlier twentieth-century attitudes, namely Brancusi's deep respect for the properties of the material, and Pollock's allowing the material and the process to dictate not only his form but also his compositional method. However, Process Art was equally based on Systemic thinking (at least as pursued by one of its leaders, Sol LeWitt), in that the artist established the initial conditions for "the rules of the game" and allowed the final form of the work to evolve naturally from them. Therefore, even the much looser work of Process artists often did not escape the imposition of the rectangular grid, as much of Eva Hesse's work can testify.

In the beginning of the 70's several artists of Hesse's generation actually started escaping the constraints of the right angle and of the Minimal "wholistic" approach. Richard Serra's dealing with gravity through balancing lead sheets against each other in the late 60's prepared the ground for his later crooked steel towers. Soi LeWitt's wall drawings led him to randomness or irregularity through an increasing degree of arbitrariness in his rule-setting. In spite of her reductionist beginnings, Dorothea Rockburne achieved increasing decentralization of the art community and a treasured stress on individuality which resulted from the life-styles of the late 60's. Nonetheless, there is no doubt that several important common characteristics converging toward a new formal idiom can be perceived, perhaps most coherently in the work of a number of artists who have been pursuing large scale, architectural or site-oriented sculpture.

With his usual acuteness in sensing changes in contemporary art, Bob Morris was among the first to announce clearly this new trend, in his article "The Present Tense of Sculpture," at the same time classifying Minimalism as a style of the past. Rightly, he stressed the importance of time in this new kind of work: form is experienced not only in space (visually), but in a space-time continuum, often through body-locomotion. Manipulation of the act of walking or ascending through the form of the sculpture, for example, creates an awareness of "kinesthetic form," thus rendering time an indispensable element for the sculptural experience.

Space perception is also being manipulated in various ways. Perspective alterations, i.e., cancelling out or accentuating perspective effects through size changes or convergence of expected parallels, have been explored by several artists. Modifying one's expectations about gravity, the body-to-ground relationship or our relationship to the vertical and to the horizontal (perceived and real), has been another device for creating a new consciousness of space.

But perhaps the most pervasive or unifying characteristic of this breed of sculptors is a new way of organizing form, which, although starting from varying premises, results in similarly complex, irregular, crooked, often irrational conglomerates. Shapes jutting against each other without apparent relationship of size or direction; in consequence use of partial systems; frequent avoidance of bilateral symmetry and of orthogonal connections; accretional and open rather than hierarchical or "wholistic" organization of parts—these are some of the methods employed to evoke a new sense of space and form, unsettling, fluctuating, cosmoscentric rather than anthropocentric, much more analogous to Baroque than to Renaissance sensibilities.
NOTES


2Ad Reinhardt (1913-1967), Barnett Newman (1905-1970), and Mark Rothko (1903-1970) were the three painters of the Abstract Expressionist generation whose forms reached, in different ways, the greatest degree of simplification and reduction. Donald Judd (b. 1928), Robert Morris (b. 1931), and Frank Stella (b. 1936) were among the leaders of the Minimalist movement (see note 4 below).

3From John Cage to LaMonte Young, and from Simone Forti to Trisha Brown and Laura Dean.

4Minimalism: a New York-based art movement, influenced by Gestalt psychology, which advocated simple, integral, non-hierarchically related forms whose wholeness could easily be perceived. Conceptualism: an umbrella term for several interrelated tendencies of the late 1960’s which stressed the intellectual content—the concept or idea—as the primary component of art, rather than form or its objectified manifestation.

5“Trends in Contemporary Architecture: Throwing Stones at the Glass Box” was a series of lectures by Paul Goldberger, Robert Venturi, Denise Scott-Brown, Charles Moore, Cesar Pelli, Michael Graves, and Robert Stern, organized by the New Gallery, Cleveland, in the fall of 1978.

6In his book quoted earlier, Complexity and Contradiction in Architecture, p. 23, Robert Venturi first verbalized this idea as “More is not less.”

7Systemic art, one of the central and perhaps the earliest of “conceptual” trends, initiated the use of systems or sets of rules as generators of the formal outcome. Geometric progressions (e.g., the Fibonacci series) or simple mathematical series were among the systems often used by artists of the 1960’s, such as Robert Smithson, Sol LeWitt, Mel Bochner, etc.

8Due to the predilection for rectilinear forms and non-hierarchical arrangements of the Minimal artists, and to the frequent use of serial relationships by Systemic artists, the rectangular grid became an all-pervading form in the art of the 1960’s.

9The earliest and best examples of this blending are her series of “Drawings that Make Themselves” of the early 1970’s.

10See note 4 above.

11In my mind, bilaterally symmetrical and closed forms, such as those of the Greek temple, are the creation of civilizations that see the human being as the center of the world; whereas irregular, sprawling forms, such as the Medieval cathedrals, the Byzantine church or the Indian temple, are the products of cosmic or theo-centric civilizations. (The former are based on the structure of animal organisms, the latter on plant or crystal growth.) See also in P.A. Michelis, Esthétique de l’Art byzantin, Flammarion, Paris, 1959, a comparable distinction between the beautiful and the sublime.

12Art in America, Jan.-Feb. 1978, pp. 70-81. I developed further some of these ideas in my own essay, “Rhythm as Form,” Landscape Architecture, May 1978, pp. 196-205.

13E.g., Siah Armajani’s Bridges of the late 60’s and early 70’s; Mary Miss’s Perimeters/Pavilions/Decays, Nassau County Museum of Fine Arts, Roslyn, N.Y., 1978; my own 33 Rhythms (pl. 6), 1977. While Armajani and Miss enhance or cancel out perspective through unexpected changes in size, I render its perception ambiguous through manipulation of familiar right-angle relationships.

"In many of my outdoor 'architectural' works I have literally worn a path to the work while building it. Combining a simple enclosed structure like a hut with the notion of a path seems to lead almost inevitably to the beginnings of a complex, that is to a grouping of several heterogeneous structures. The problem seems to be how to connect them without resorting to an a priori grid or orthogonal system of organization, that is, a kind of ideological aesthetic which is imposed from the outside and no longer directly connected to immediate empirical needs . . . how to set up a structure which would develop out of the web or labyrinth of human behavior patterns. I am reminded of the medieval town or walled city which developed out of the need for protection and close proximity to the center market place. Construction and maintenance of the walls was expensive so space was at a premium and people crowded businesses and residences together in narrow streets, building out over the streets wherever possible. I am also reminded of amusement park architecture which eschews clear wide axial approaches in favor of dense clusters of booths and rides along narrow labyrinthine, confusing streets because the denser the crowd the greater the rate of spending. Finally, there are the camps of the Mbuti pygmies, nomadic forest dwellers. Their camps have no definite shape because the size of the band changes constantly as people move in and out. Unlike most peoples the Mbuti do not build with reference to the cardinal points of the compass or the rising and the setting of the sun. However, the orientation of the door of their huts is important. The exact orientation of the door indicates their esteem or lack of it for their neighbors. High regard is indicated by placing the door in the direction of a neighbor's hut. If hostility develops the door is simply closed over and another opened up in the opposite direction."

— Alice Aycock

"Architecture/sculpture is the means for humans to measure distances between things, to reach objects and to encounter them. One does not encounter things only theoretically but through activity, investigation, and management prior to one’s knowledge of things. ‘Practical activity has its own sort of vision’ (Heidegger). The relationship between the front and back door of a house is within our activity. It is our activity that embraces these two distant and separate entities. Practical activity is not ‘atheoretical.’

Architecture/sculpture is about the concept and thingness of wall, roof, floor, room, chair, door, etc.; not a living quarter (house) or crossing over (bridge), climbing up (tower) or walking along the edge (ledges). Architecture/sculpture is to make them open and available and to use them as instruments and materials of work that anticipate one’s perimeter of activity. Not the ‘thing’ but the instruments are immediately given; wall, roof, floor, etc. Every instrument is part of a complex, and all belong together unto a totality which includes ‘whatever’ makes a house, a bridge, a tower, a ledge."


"Jackie Ferrara’s recent sculpture . . . has obvious affinities with earlier Minimalism, particularly that of Carl Andre’s stack pieces and Sol LeWitt’s open cubes. But while she adopts an elementary vocabulary of regular forms, she alters the syntax, producing irregular structures that are peculiarly proportioned. In doing so, she appears to wring Minimalism into a Mannerist-type culmination.

". . . Though clear-cut in every detail, the pyramid triggers peculiar illusions. As the spectator moves around the piece, he sees angles and edges shifting this way and that in a virtually hallucinatory test of astigmatism . . .

". . . This type of art obviously signals an important change in sensibility. Whether by design or accident, Ferrara now finds herself on the cutting edge of this new sensibility."

—David Bourdon (*Arts Magazine*, Jan. 1976, p. 91)

"Both the form and imagery in my work attempt to actualize certain contradictions — the intentional and the arbitrary — which I have experienced as co-dependent aspects of existence. That which seems to be highly organized and directed is often randomly originated, interrupted, or terminated. For example, the increments which establish the proportions in each piece are extrapolated from chance relationships I discover in small dimensional studies for every construction. Each sculpture exists as a structural and visual fact, but is also intentionally open; it is simply one factor in the larger polynomial that results from its placement in the environment. Intrusions in closed systems are perceived as clutter. Open systems cannot be cluttered. Interactive open systems are not static presumptions of perfection; instead they encompass kinetic realities. My work is open and intended to be interactive."

— Michael D. Hall (*Michael Hall: Three Installations*, Detroit Institute of Arts, 1977, p. 27)

"Essentially, my brickwork does not set up frames of reference, whether they be the physical horizon, art stylist or status quo response. It is frameless: it comes from beneath or before one's familiar standing-ground, physically or conceptually, projecting into a midst seemingly only to stimulate pre-verbal imagination. If I upset the established sense of grid patterns, whether those be the horizontality-verticallity of existing buildings or the expected mental responses, this is good. I avoid regularity also precisely in order to free up perceptions for accepting an organic, curvilinear, expressive context of sculptural form based on the realities of gravity, geological and biological stress, movement patterns, and residues and traces of past occurrences.

On-goingness, sense of ground and body movement, and the illusionism of tip-of-the-iceberg force are in play when I start a shape up from under ground-level at a diagonal to the existing horizon. I abhor concrete surface pads for setting sculpture on top: the sense of scale, presence, imaginative transformation of image is lost. Sculpture is never merely the sum of its materials, even though its reality-sense strength lies primarily in recognition of its material identity. That is merely 3-D form; sculpture, as art, must meld structural with associational meaning, expressively, in what I term Structural Expressionism."

— John Spofforth
Athena Tacha: 33 *Rhythms (Homage to the Cyclades)*, detail. 1977-78. White concrete with multi-colored risers. 18 x 225 x 175 feet (model).

"... One can manipulate walking by changing the ground’s configuration, by controlling the environment’s visual stimuli, and by subtly altering the body’s relationship to gravity.

These are the means I employ to transform the body-rhythm of walking into a receiver of artistic expression, a sensor of a new kind of form. By disrupting the usual expectations about walking, ascending and descending, I try to re-attune our sensitivity to kinesthetic experiences. By breaking up the ground into steps (the two meanings of the word are no coincidence), and by varying the height, depth, width, inclination, direction and regularity of these steps, I aim to create a rich variety of temporal patterns, a different feeling of space and a new awareness of gravity."

— Athena Tacha (*Landscape Architecture*, May 1978, p. 197)

"Make the body feel true and the mind's concept and manipulation of it seem false, and on the other hand take a step and feel that the body is totally at the mercy of the mind. One does not negate the other but the rhythmical alternation of these temporal or physical impulses (indications) make for a new way of being in space and time."

— George Trakas (George Trakas: *Columnar Pass*, Philadelphia College of Art, 1977, p. 7)

"... The synchronization of the surface structure with the spectator's steps is synonymous to the sprocket holes in motion picture film with a camera's moving mechanism. The bridge is meant to function as a camera where the moving viewer becomes part of the equipment. The body functions as a generator of motion and one's retinal apparatus in connection with the brain is the film. . . . . The bridge functions as a synthesizer of body motion and vision."


“The work that I do as an artist, the installations and constructions that I make, create spatial situations in which the perception of the viewer becomes the subject of the work.

“The environments are constructed to be experienced with the whole body, through movement and over time. All aspects of the work are not seen at once. The work reveals itself sequentially, through inspection.

“Each construction is conceived for its particular site and built for that site alone. Materials and formal constructs change to accommodate the particulars of each site, but the intention of the work is constant: to create an active, participatory situation that allows discovery and the growth of (self) awareness.”

— Elyn Zimmerman
WINTER DEATH SONGS
Seven Haiku for Low Voice and Piano
Klaus George Roy, Op. 115

I
IN MY DARK WINTER
LYING ILL....
AT LAST I ASK
HOW FARES MY NEIGHBOR?
BASHO

II
POOR THIN CRESCENT
SHIVERING AND
TWISTED HIGH...
IN THE BITTER DARK
ISSA

III
AS TO ICICLES
I OFTEN WONDER
WHY THEY GROW
SOME LONG.....SOME SHORT
Omitsura

IV
DEATH-SONG:
POET NIGHTINGALE....
WILL I HEAR YOUR
LATER VERSES
IN THE VALE OF DEATH?
ANON.

V
DEATH-SONG:
SUDDENLY YOU LIGHT
AND AS SUDDENLY
GO DARK....
FELLOW-FIREFLY
Chne-Jo

VI
WHEN I RAISED MY HEAD....
THERE WAS MY
RIGID BODY
LYING BITTER COLD
 себи

VII
DEATH-SONG:
IF THEY ASK FOR ME
SAY: HE HAD SOME
BUSINESS
IN ANOTHER WORLD
Sokan

Klaus G. Roy, a native of Vienna, Austria, holds degrees from Boston University and Harvard University; he studied musicology with Karl Geiringer and composition with Walter Piston. He has served as program editor of The Cleveland Orchestra since 1958. In the last thirty years, he has been active as music librarian, music critic, annotator for more than 150 recordings, teacher, lecturer, composer of over 100 works, poet (of light verse), festival tour host, radio and TV commentator, and board member of numerous cultural organizations. His article "Mozart at Beethoven's Grave" was published in the first issue of The Gamut, Fall, 1980. The "Winter Death Songs" are published for the first time in these pages, from the composer's manuscript. (Portrait sketch by Laszlo Krausz.)

The texts for "Winter Death Songs" are from THE FOUR SEASONS: JAPANESE HAIKU Second Series, translated by Peter Beilenson, © 1958 by the Peter Pauper Press. Used by permission.
In memory of Clark Steuermann
(February 28, 1932 - January 9, 1982)
and Emil Dannenberg (July 30, 1917 - January 16, 1982)

To Jan De Groot,
An incomparable artist
"Winter Death Songs"
Translation from the Japanese by Peter projected

Seven Haiku for Low Voice and Piano
Klaus G. Roy, op. 115

J = 54

In my dark winter...

Lying ill...
at last I ask...

how faces my neighbor

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Suddenly you light

and as suddenly go dark...

fellow-firefly
William I. Sharrock

WAR AND REVOLUTION IN THE TWENTIETH CENTURY

The combination of total war and political idealism threatens individual freedom everywhere in the world.

Toward the end of John Steinbeck’s novel *The Moon is Down*, a simple but moving and prophetic vision of the psychological impact of foreign occupation on a small community in wartime, the mayor of a conquered village makes the following observation to the commanding officer of the occupation forces:

“You see, sir, nothing can change it. You will be destroyed and driven out.” His voice was very soft.

“The people don’t like to be conquered, sir, and so they will not be. Free men cannot start a war, but once it is started, they can fight on in defeat. Herd men, followers of a leader, cannot do that, and so it is always the herd men who win battles and the free men who win wars. You will find that is so, sir.”

Steinbeck wrote *The Moon is Down* at a time of profound despair, during the depths of the Nazi conquest of Europe in 1942. Yet the quotation accurately represents the deep resentment of conquered peoples and forecasts the subsequent resistance movement.

This fictional scene is reminiscent of a real historical incident that occurred forty-five years ago during the opening year of the Spanish Civil War. The conflict began in the summer of 1936 when the army, under the command of General Francisco Franco, revolted against the legally elected Popular Front government in Madrid. His goal was to “restore legitimate order” in Spain and to resurrect a more traditional authoritarian political regime. One of the army’s leaders was General José Millán Astray, a very odd man indeed. He had one eye, one leg, one arm, and most of his remaining fingers had been shot away in previous military engagements. He was proud and vain, wildly excitable and, at such times, incapable of coherent speech. To many, his appearance and demeanor reflected his senseless battle cry, “Viva la Muerte!” — Long Live Death!

In October 1936, in the Ceremonial Hall of the ancient University of Salamanca, recently occupied by the Franco rebels, Millán Astray rose to harangue the audience, denouncing as traitors to Spain all who did not rally to the support of the army. He concluded his remarks with the fascist salute and the cry, “Viva la Muerte!” Among those in the audience was the famous Spanish philosopher, Miguel de Unamuno, seventy-two years old, author of *The Tragic Sense of Life*, and for the previous thirty-five years Rector of the University of Salamanca. What followed was one of the great confrontations of history — the completely civilized man (Unamuno) confronting the pure nihilist (Millán Astray).

An earlier version of this essay was presented at Cleveland State University’s Extended Campus College week-end conference on International Peace, 1 August 1981.

*Europa im 18. Jahrh.*

A native of Milwaukee, William I. Sharrock attended Denison University and received an M.A. and a Ph.D. in History from the University of Wisconsin. Since 1969 he has taught at Cleveland State University, where he is currently an Associate Professor and Chairman of the Department of History. He is author of a book, *French Imperialism in the Middle East* (Univ. of Wisconsin Press, 1976), and has published a number of articles in his special field, modern French diplomatic history. (Photo: Louis Milic)
As General Millán Astray took his seat, Unamuno, who since the beginning of the Civil War had opposed the methods of Franco and the nationalists, rose amid the clamor and asked to comment. "I have heard just now," he said, "a barbaric and senseless cry: 'Long Live Death.' I must tell you that this outlandish paradox is repellant to me. General Millán Astray is a cripple. I mean no discourtesy; he is a war invalid. So was Cervantes. Unfortunately, there are all too many cripples in Spain now. And soon there will be even more if God does not come to our aid. For a cripple who lacks the spiritual greatness of Cervantes... who lacks that loftiness of mind, is likely to seek ominous relief in seeing mutilation around him."

At this point, General Millán Astray could restrain himself no longer and shouted wildly: "Muera la Intelligencia!" — To Death with Intelligence! Unamuno, equally shocked at this insanity, closed his remarks this way: "You will win, but you will not win over. You will win because you possess more than enough brute force, but you will not win over, because to win over means to persuade. And in order to persuade you would need what you lack — reason and right in the struggle. I consider it futile to exhort you to think of Spain."77

Unamuno died under house arrest shortly thereafter, but his prophecy seems to have been correct — in much the same sense as Steinbeck’s World War II novel. Franco did win the bloody civil war, after more than a million Spaniards had died. But recent history suggests that he never succeeded in winning over the hearts and minds of the Spanish people. These two incidents, one fiction, one fact, demonstrate a certain correlation between conditions of twentieth-century warfare and the human concern for freedom, for warfare has come to pose an unprecedented threat to individual liberties. Since the desire for individual liberty is often linked to social revolution, there is a close connection between twentieth-century war and the fundamental and violent sociopolitical changes of our age.

* * * *

War has been a constant feature of history since primitive times. In the ancient world warfare was usually a community enterprise. But as citizens began to specialize in different jobs, becoming bureaucrats, farmers, artisans, tradespeople and so forth, a definable warrior class developed, and the army became a regular component of the state. The professional soldier was a man apart from the rest of society; his job was to fight. Indeed it was a fundamental assumption that all common citizens would be taxed in various ways in order to pay the warrior class to stand as a permanent armed force for the defense of the community or state. Warfare, although costly, had only a marginal effect on civilian life, except in those instances where marching armies trod across somebody’s plot of land or peasant cottages were ransacked for food and booty. Otherwise, civilian life generally carried on business as usual.

Well into the nineteenth century, wars were usually fought by small professional armies. Military thinking placed a premium on strategy and maneuver rather than on massive pitched battles involving hundreds of thousands of soldiers. Wars were fought for limited goals and were followed by negotiated peace settlements. This pattern characterized the wars of Louis XIV, the colonial struggles of the eighteenth century, and the national wars for unification in the nineteenth century. It remained a cardinal principle of the policies of German Chancellor Otto von Bismarck, until his forced resignation in 1890. The German military theorist of the early nineteenth century Karl von Clausewitz defined war as "a continuation of political intercourse by other means." That is, when tact, shrewdness and diplomacy failed to achieve the goals of a state, force was the next logical step to take. For Clausewitz, therefore, precisely because war was neither ruinously costly nor unacceptably destructive, it was regarded as a natural and useful instrument of statecraft.

What a complete change the contemporary age has brought! From the late nineteenth into the twentieth century, the application of industrial advances to the art of warfare made possible the mass production of weaponry of vastly increased destructiveness: tanks, submarines, poison gas, long-range howitzers. The immediate impact of these changes went far beyond the battlefield. In World War I, "Big Bertha" was capable of lobbing shells from the Marne River forty miles into the heart of Paris. The airplane and the aerial bomb brought well within the range of military strategy targets far behind the lines that were important to the enemy’s economy and civilian morale. Stories of the Battle of Britain in 1940 and the Allied firebombing raids of Cologne, Dresden, Berlin and Hamburg from 1943 to 1945 are still horrifyingly familiar. Such capabilities are, of course, magnified many times by the development of nuclear weapons. The
The currently debated neutron bomb, a supposedly "clean" weapon aimed at the destruction of life rather than buildings, is only the most recent example of the increasing vulnerability of ordinary people to military strategy. Not without reason, the twentieth century has been called "the century of total war."

It must be clear that in twentieth-century warfare Clausewitz's nineteenth-century conception of war as a natural and useful instrument of statecraft has become a dangerously outmoded notion indeed. War in our century, precisely because of its direct impact on civilian populations, holds revolutionary implications. The historical distinction between soldier and civilian becomes blurred. In conditions of total war, battle lines are everywhere; any target of civilian production or morale is considered a military objective. Statistics for World Wars I and II show with striking clarity that civilian casualties far outnumbered military casualties in every country where military engagements occurred.

The heavy demands of total war made it necessary for governments— even democracies like England, France and the United States, which historically had championed values like laissez faire, free competition, free trade, free enterprise—to exercise ever more stringent government controls over their societies to assure that the nation's dwindling resources were channeled as efficiently as possible into the war effort. The results everywhere affected civilian populations directly. Nations that previously had resisted it adopted universal military service; vital commodities such as gasoline, metals and food items were rationed; governments requisitioned private housing; factories were regulated; strikes were proscribed. Indeed, success in total warfare requires the effective disciplining of a society, a fact which has ironic implications, as I will point out later.

Of course it is impossible to say exactly when "total war" began. The American Civil War and the wars of the French Revolution were harbingers of the trend. In 1793, for example, the leaders of the Reign of Terror in France issued the following directive to all French people as a measure to protect the Revolution from invading armies. It was called the "Levée en masse."

From this moment until that in which the enemy shall have been driven from the territory of the Republic, all Frenchmen are in permanent requisition for the service of the armies.

The young men shall go to battle; the married men shall forge arms and transport provisions; the women shall make tents and clothing and shall serve in the hospitals; the children shall make old linen into lint; the old men shall take themselves to the public places in order to arouse the courage of the warriors and preach the hatred of kings and the unity of the Republic.

The Levée en masse certainly expresses the intention to mobilize an entire nation for war. But many French people, of course, escaped its impact just as many men drafted into the Union and Confederate armies during the American Civil War escaped conscription by paying substitutes to go in their places. Napoleon, who popularized the cynical notion that God was on the side of the largest battalions, actually managed to raise only one army—the 500,000 man force he led into Russia in 1812—remotely approaching in size the massive conscripted forces that clashed at Passchendaele, Verdun and the Somme River in 1915 and 1916. Similarly atypical of the nineteenth century was Sherman's infamous siege-and-scorched-earth campaign through Georgia in 1865, a foretaste of total war. Only in this century, however, have technological advances in communication, transportation and law enforcement made it possible for governments really to enforce all-embracing directives like the Levée en masse and to lead, feed and equip military forces numbering into the millions. In any event, the evolution of total warfare has spurred a trend toward increasing government planning of the economy which has spilled over into peacetime. Such shifts have a revolutionary impact on society as a whole.

Like total war, social revolution in the sense of fundamental changes in institutions is very rare in history up until recent times. The word "revolution," originally an astronomical term describing planetary motion, acquired political application only in 1688 to describe the "Glorious Revolution" in England. Far from signifying fundamental change in political institutions and social structure, however, in 1688 the term was meant to signify a restoration of monarchical power to its former righteousness. It was not until the eighteenth century that the word began to be used to mean the end of the old order and the birth of a new one. The French Revolution of 1789-1794 represents the first instance of such fundamental transformation. But the radical social change that occurred in the Revolution was neither pre-
Wartime propaganda was skillfully applied to national recruiting efforts. The famous poster on the left was designed to shame able-bodied civilian men into volunteering for military service before the draft was introduced to Britain in 1916. Somewhat less subtle, the poster on the right was aimed at American men during World War II.

mediated nor stimulated by conditions already existing under the Old Regime. What turned the bourgeoisie from reformers to radicals was the experience of revolution itself; it was the Revolution that created the revolutionaries.8

The totality of change that I include as part of the definition of "social revolution" distinguishes it from political revolutions such as coups, rebellions and wars of independence, which involve only partial change. In contrast, social revolution seeks to overturn the entire structure of society and is generated by those who have no stake in preserving the existing system.3 War-time conditions increase a nation's vulnerability to both kinds of revolution. But the conditions for a complete social transformation are most often found in a country that has just fought a severely debilitating war like the total wars of the twentieth century.

Whereas war is usually aimed at finite objectives (national defense, territory, economic advantage), both social and political revolutions are bound up with individuals' ideas of their own freedom. Only within the last hundred years or so have the broad masses of men and women had enough education and leisure to become concerned with intangible goals like freedom.10 I observed earlier that total war blurred the traditional distinction between soldier and civilian. The draft, rationing, and similar wartime measures required ordinary citizens to make extraordinary contributions to the war effort. Either through direct service in the armed forces, or in the medical corps, or through service in war industries, they were required to make contributions which their ancestors had never been called upon to make.

These ordinary people — workers, lower middle classes, women — had historically been ignored by both liberal and authoritarian governments in the decision-making process. Is it any wonder that people being asked to make the kinds of sacrifices described above should demand a more direct and active role in charting the direction of their societies? It is no coincidence that women, largely because of their contributions to the war effort, won the right to vote for the first time in Germany, England and the United States following World War I. Nor is it a coincidence that the English Labor Party, largely because of the contributions of workers to the war effort and the havoc that the demands of total war wrought upon traditional liberal political philosophy, emerged from World War I as the second party in the English political system — replacing the Lib-
erals. Nor is it a coincidence that socialists in France and Italy, largely because of their efforts in the Resistance to Hitler and Mussolini during the Second World War, have enjoyed a major role in the political life of their countries. This has been reflected most recently in the election of François Mitterrand, himself a former résistant, as president of the Fifth French Republic. These social changes, although not nearly so profound as the thoroughgoing social revolutions carried out in Russia after 1917 or China after 1949, were nevertheless important and were generated in part by the very nature of warfare in this century.

Total warfare is intimately connected to revolution because it provides the ultimate test of a nation's military, social, economic and political institutions. Where a nation's social and economic institutions are successfully adapted to meet the test of total war, its existing political and social structure will be protected if not strengthened. Thus, following World War I, France, Britain and the United States experienced some of the economic and social changes mentioned above but underwent neither political nor social revolution. After victory in the Second World War, the United States and Britain emerged with their democratic political systems invigorated, a result surprising to those who had openly questioned the ability of democratic systems to cope effectively with crisis situations like the Great Depression.

Conversely, where a nation's social and economic institutions fail to pass the test of total war, then the impact is usually direct, profound and frequently revolutionary. Several examples jump to mind. Lenin and a tiny party of Bolsheviks engineered their revolution in 1917 in the midst of the incredible dislocations brought on by czarist Russia's defeat in World War I. The German Empire of Kaiser Wilhelm II was likewise defeated in that struggle and succumbed to a political revolution which brought about the ill-fated Weimar Republic. Germany's ally in the war, the Austro-Hungarian Empire, simply disappeared from the map in 1918, dissolving into the succession states of Austria, Hungary, Czechoslovakia and Yugoslavia. The Third French Republic failed the test of total war against Hitler in 1940 and succumbed to the wrenching political and social humiliation of Marshal Pétain's "national revolution" at Vichy during World War II. Hitler and Mussolini's fascist political systems, failing the ultimate test of total war, collapsed entirely, as did imperial Japan. Examples like these could be multiplied, but it must be clear that the relationship between total war and revolution is particularly close — a relationship that demands careful consideration in any future military and strategic planning.

The complete involvement of total warfare, with its revolutionary social and political effects, is exacerbated by the renewed importance of social and political idealism as motivations for conflict. A foretaste of the particular bitterness that abstract principles inject into wars may be seen in the two anticipations of total warfare already mentioned — the French Revolution and the American Civil War. What roused the other European powers to an alliance against France in 1792 was the announcement by the new republic that it intended to encourage similar revolutions in other countries. And in America in the 1860's, the Northern states, because of their moral superiority on the issue of slavery, felt justified in imposing a ruinous regime of Reconstruction on the defeated South. Indeed, throughout history, the wars fought for principles — in the past, this most often has meant religious wars — have been the bloodiest, and have involved the greatest proportion of the general populace.

During the classical age of international relations discussed above, wars were generally fought by professional soldiers for limited goals and were followed by negotiated peace settlements. World War I changed much of this. With the rise to power of the Bolsheviks in Russia and the first hesitant entry of the United States into the mainstream of world political leadership, two potential super-powers with rival political viewpoints emerged at the same time. It is revealing to note how each of these nations' leaders viewed the war. V. I. Lenin, of course, saw the world conflict through Marxist spectacles. For him the war was a capitalist struggle, perhaps signaling the death throes of capitalism. Therefore, Lenin saw in the dislocations of the war a splendid opportunity to force the pace of the Marxist proletarian revolution. Not only could the Marxist timetable be telescoped in Russia, but conditions appeared ripe for revolution throughout the more industrialized areas of war-torn Europe. Once Lenin and his party had seized power in November, 1917, therefore, their goal was not the traditional one of defending the homeland or of making territorial gains. These were publicly renounced. Rather, Lenin intended to consolidate power in Russia as quickly as possible in order to encourage world socialist revolution — not at all a bizarre notion in 1917-1918, when mutinies racked the French army and nascent commu-
nist parties were working to seize power in Berlin, Bavaria and Hungary. An all-embracing universal ideology had become a primary tenet of the foreign policy of a major nation.

On the other hand, what kind of war was it for President Woodrow Wilson, who had brought a reluctant United States into the struggle only in 1917, following the collapse of czarist Russia? For him it was certainly not a traditional struggle for American defense or territorial aggrandizement. Rather, it was "a war to end all war," "a war to make the world safe for democracy," a war to assert the eighteenth century belief in the fundamental goodness of man against tyranny, oppression, autocracy and militarism. Wilson's famous Fourteen Points of 1918 spelled out these very different kinds of war aims. So just as Lenin emerged from the struggle as a spokesman for the ideology of world socialist revolution, Woodrow Wilson became Lenin's counterpart, articulating an ideology of global liberal democracy. These two personalities, introducing rival programs for world order, epitomize the revolution in war and diplomacy that has colored our century. The emphasis of war shifted away from the traditional competition for power toward being an ideological contest.

The result undoubtedly was to raise the level, tone and rhetoric of international relations to a higher sphere, but at the same time it made both diplomacy and war infinitely more dangerous. The "old diplomacy" of power and territorial competition made compromise a likely option. Ideology, however, does not. The aims of war become mystical, almost religious, in nature. The mixture of ideology with traditional diplomacy and war has made rational compromise solutions to world problems virtually impossible. Modern propaganda machines portray goodness, truth and beauty as the exclusive properties of one side while the enemy is depicted as the embodiment of evil, falsehood and ugliness. One is reminded of First World War recruiting posters in England and France projecting the image of the spike-helmeted "Hun" with cloven hooves and forked tail.

The immense danger of this revolution in diplomacy becomes apparent when it is coupled with the fact that the twentieth century has witnessed the evolution of the concept of total war. The "new diplomacy" no longer seeks limited goals but total victory, no longer is satisfied with negotiated peace settlements but demands unconditional surrender. These new ground rules were evident in both world wars. Victorious Germany imposed a ruthlessly Carthaginian peace settlement on defeated Russia at Brest-Litovsk in 1918, and was in turn treated to a similar "Diktat" at Versailles a year later. At the Casablanca Conference of 1943, Allied leaders officially adopted the formula of Unconditional Surrender vis-à-vis the Axis powers and consistently applied that doctrine even when a slightly more moderate negotiating stance — particularly against the Japanese — might have rendered Hiroshima and Nagasaki unnecessary. It should be apparent that the origins of the global Cold War between the United States and the U.S.S.R. are to be found not simply in the painful aftermath of World War II, but perhaps even more in the ideological juxtaposition of Lenin versus Wilson in 1917.

In fact, historians in the future may very well look back at the period from 1914 to 1970 and see the ideological struggle between the United States and the Soviet Union as the fundamental conflict of the age — a kind of international civil war with global ramifications. These historians may well lump the first and second world wars together as being simply two aspects of the same conflict, a "second Thirty Years' War," as it were, much as today's historians group together the five separate wars of Napoleon under the general rubric, "the Napoleonic wars." This is not to imply that ideology is now the only issue in great-power diplomacy. Traditional economic, political and social interests remain, and in any case, ideological fervor has a way of undergoing a moderating Thermidorian reaction as its adherents consolidate authority and gain confidence. But it cannot be gainsaid that the infusion of a universal ideological perspective has complicated and intensified more traditional national rivalries in the twentieth century. This alteration in the nature of war and diplomacy has engendered two corollary social consequences, both currently unresolved and both profoundly disturbing.

There is much suggestive evidence that after World War I young servicemen became sharply conscious of their solidarity by virtue of common experience. The monotony and camaraderie of life in the trenches and the common tragedy of fighting provided a palpable identity. Soldiers became a new class, a class of self-perceived victims. This is not to imply of course that soldiers in previous military engagements did not experience similar feelings of identity, frustration and anxiety. John Keegan, a noted British military historian, has observed in his analysis of battles
from Agincourt in 1415 to the Somme in 1916, that all soldiers shared one common value: survival. My point is simply that by the end of World War I, the sheer numbers of such self-perceived victims contained the potential for serious political and social repercussions. It does not require a terribly shrewd observer of the First World War to notice a growing sense of hostility on the part of soldiers toward the "home front" as a place where old politicians continued their traditional political rivalries, where businessmen continued to make their profits, and where some workers avoided their duty to fight in the trenches. The first blush of youthful enthusiasm for combat that some described in 1914 was brutally effaced by the lengthening struggle and the demands of attrition warfare. Young peoples' bitterness, hostility and despair at the feeling of becoming a "lost generation" can be demonstrated with painful clarity in the following examples. The first comes from the diary of a French soldier returning to Paris on leave from the front in 1916.

Saturday, 22 April 1916: Paris is lovely — the crowds as before, the trees green, the boulevards sunny. I can’t stop thinking of Champagne by contrast — the houses smashed to a few bits of crumbling wall, the huge landscapes with no vegetation, save for a few pines, reduced almost to sticks, and the pieces of leprous grass growing round the shell-holes that mark the whitish and greenish earth like smallpox on a face. But here people go about their business regardless of us [my emphasis] — avenue de l'Opéra, boulevard des Capucines, boulevard de la Madeleine, rue Royale, place de la Concorde are all as before. The lawns are green, the flower-baskets are full of brightly colored ... flowers, the trees are in their first flowering of spring. It cannot be lovelier....

This young soldier is obviously happy to be away from the slaughter of Champagne. His diary entry understandably ignores the sacrifices imposed upon Parisian society by the demands of total war, but the telling phrase, "regardless of us," betrays an uncomfortable consciousness of sacrifices not being equitably shared. The second example comes from across the Rhine in Germany. Erich Maria Remarque published All Quiet on the Western Front in 1928. Although fiction, the story is based upon the author's own experiences in the German army from 1914 to 1918. Toward the end of the book, Paul Baumer, the young German soldier who narrates the story, describes a field hospital in all its gory detail, decrieing this as the end product of a thousand years of Western civilization. He then speaks of himself:

I am young. I am twenty years old; yet I know nothing of life but despair, death, fear and fateful superficiality cast over an abyss of sorrow. I see how peoples are set against one another, and in silence, unknowingly, foolishly, obediently, innocently slay one another: I see that the keenest brains of the world invent weapons and words to make it yet more refined and enduring. And all men of my age, here and there, throughout the whole world, see these things with me. What would our fathers do if we suddenly stood up and came before them and proffered our account? What do they expect of us if a time ever comes when the war is over? Through the years our business has been killing; — it was our first calling in life. Our knowledge of life is limited to death. What will happen afterwards? And what shall come out of us?

The frustrations, anxiety, bitterness and despair depicted in these two quotations intensified after demobilization when young soldiers found themselves unable to adapt again to their prewar lives or to find jobs in the exceptionally difficult postwar economy. They felt humiliated and betrayed by the ingratitude of the societies they had presumably gone off to defend. The record shows that these were the individuals who formed the vanguard of Mussolini's blackshirts in Italy, Hitler's brownshirts in Germany, and the fascist-style leagues in France in the 1920s and 1930s. It is well to remember that a revolutionary social and political attitude, born out of the conditions of total war, does not always have to come from the Left. This historical experience offers especially compelling warnings to contemporary American society, which has yet to resolve the problems of its Vietnam era veterans.

The second consequence of the impact of total war on our way of life is one which has concerned political observers for more than a generation and offers a particularly vexing challenge to those who live in democratic societies and value the freedoms inherent in them. In World War II the democratic nations at terrible cost emerged victorious over the evils of Nazism and fascism. This in itself, at least for the short run, represented a shot in the arm for the democratic idea, beleaguered during the 1930s by its inability to cope effectively with the challenge of the depression. The history of the postwar period in the United States and Western Europe seems to buttress the notion that democracy had been vindicated and invigorated. Yet, ironically, the only way the Western allies could win the war was to organize their societies along authoritarian lines, adopting many of the methods and techniques of their enemies. As indicated earlier, the successful prosecution of total war requires a certain
Propaganda is a double-edged sword. On the left, this World War I American poster depicts the German soldier as a barbarian about to ravish a defenseless French woman and child. Compare that with the World War II German poster on the right which portrays the Russian opponent as a hulking sub-human monster. Such distortion, clearly designed for home consumption, rendered compromise peace settlements virtually impossible.

level of social and political discipline. During World War II, for example, Winston Churchill amassed personal authority in England virtually unprecedented in a democracy. The prime minister also acquired the newly created position of minister of defense and thus absorbed direct control of all three branches of the armed forces. An Emergency Powers Act, adopted after only one day's debate in the House of Commons, gave Churchill's government "practically unlimited authority over all British citizens and their property." That such authoritarian organization did not continue on into peacetime is perhaps cause for congratulation — or at least relief. But it is certainly an ill omen for the future if war cannot be contained.

Concern about this paradox between war and individual freedom has found expression in many different forms. I began this essay with reference to Steinbeck's *The Moon is Down* and to the confrontation between Unamuno and Millán Astray in 1936. Both the American writer and the Spanish philosopher articulated concern about the peril to individual liberty inherent in warfare, yet both were optimistic that free men would win out in the long run. Other observers, however, were not nearly so sanguine about the future. Early in World War II, an American social scientist predicted that the war would produce a world of "garrison states" in which the "specialists in violence" would fix a durable grip on societies everywhere. Norman Mailer's first novel, *The Naked and the Dead*, written in anger immediately following the war, portrays the increasingly authoritarian organization of an American military unit in the Pacific — with the obvious undertone that the military reflects the values of the society it defends. Léon Blum, France's socialist leader, feared that the Nazis' downfall might even conceal a deeper victory. "I tremble," he wrote after the war, "at the thought that you are already conquerors in this sense: you have breathed such terror all about that to master you, to prevent the return of your fury, we shall see no other way of fashioning the world save in your image, your laws, the law of Force."

Steinbeck and Unamuno believed that military force could not in the long run conquer a people. But did they underestimate the danger that a people could be conquered
by an indirect subversion of their liberties under the guise of patriotism or other ideals? Perhaps the most direct and poignant evocation of this danger came from the mouth of American cartoonist Walt Kelly's little comic strip 'possum, Pogo. Following a pyrrhic victory in some sort of political confrontation that required numerous compromises of principle, Pogo announced in somewhat bewildered fashion to his companions in the Okefenokee Swamp: "We have met the enemy... and he is us!"

NOTES


2. I have recreated this scene based on eyewitness notes recorded by Don Antonio Bahamonde. Cited in Robert Payne (ed.), The Civil War in Spain, 1936-1939 (New York, 1970), 110-117. Also valuable in understanding the confrontation is the 1959 French Film, Mourir à Madrid, shown in the U.S. as To Die in Madrid.


6. The social effects of total war in England, for example, are discussed in Arthur Marwick, The Deluge: British Society and the First World War (New York, 1970).


10. This point is developed by Hannah Arendt in On Revolution (New York, 1965) and also in On Violence (New York, 1969), part I.


16. Erich Maria Remarque, All Quiet on the Western Front (Boston, 1928 — originally published in German in 1928), 266-267.

17. For the radical right wing appeal to youth, see Peter Loewenberg, "The Psychohistorical Origins of the Nazi Youth Cohort" in American Historical Review, 76, no. 5 (December 1971), 1457-1502.


FICTION: Betty Jarmusch

SACRED GROVE

I keep this letter close. It’s Shaker spirit writing. See the spidery letters, symbolic flowers, the leaf patterns? Like around our house, on South Park Boulevard. Patterns under the great trees, from the virgin forest, left by the virgin Shakers. See the birds, the harp, the joyous golden balls?

I am joyous now. I feel the Shakers are joyous. So is Henry. That nurse over there — the tall, pale, smiling one — is like a Shaker. With the same emanations. Radiating piety and celibacy and joy. Like Sister Emmaliza. The quintessential Shaker.

Everything is quintessential. That night. Henry, the law partner. Not me, unfortunately. Not the quintessential Shaker Heights wife. They’re tanned, sleek, their eyes bright from following tennis balls. Never eyes haunted, shadowy with old questions. Never eyes that look lost.

Do you know what it’s like to live on South Park Boulevard, when the ghosts of the Shakers come out?

They come when the shadows gather under the trees. Around the mansions, or the standard Georgians like ours, on the curving boulevard where their cemetery was. Until the city transplanted them. Their spirits move, they come to the Sacred Grove, their consecrated ground of outdoor worship.

But for the nearly ten years Henry and I lived there, only blocks away, do you think he’d walk with me to hunt for the Sacred Grove? And take the dog along? The dog adored Henry, it would have loved it. No, maybe it wouldn’t have. I think the dog knew too much.

You know the Shakers held concourse with the spirits, who sent them messages, like this one. I read, from records of our North Union colony, about two young sisters, dead from consumption. The spirits of both departed were in attendance at their funeral, expressing love and gratitude. The records also mention that the spirit of Jesus Christ made a visitation there for three months, and the whole Shaker village was closed to outsiders.

A marriage counselor might have told Henry to go with me, why not, to find the Sacred Grove. But of course Henry, being so carefully groomed for Senior Partner, could not visit a marriage counselor. It might shake faith in Spires May Pofletter.

Once, though, Henry was collared by our Associate Rector, who is also a marriage counselor.

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counselor, unbeknownst to Henry. I gather that the Rev. Dr. asked about me, said I had seemed quite—ah—whimsical, lately. And Henry said I was just great, as much fun as ever. That was Henry's best compliment, that you were so much fun. I guess for a long time I haven't been much fun for Henry.

That house has one hundred fourteen windows. Once I walked through and counted them all. Some nights I looked out of nearly every one.

Looking for Henry.

Henry never was out there, but the Shakers were. Have they always been there? Haven't I—and everybody in Shaker Heights, at least along South Park Boulevard—known they were still there, around us? Watching, with milky, translucent faces? Waiting? But, oh my God, waiting for what?

The dog saw them. The sad Irish setter Henry bought for me, because he was away so much. To keep me company, since we didn't seem to be having children. Actually, I liked being alone, drifting through the echoing house, inside the leaf patterns.

Sometimes I was floating through leafy clouds. Dissociated, that dark-eyed doctor said. But he leaned closer and added: Delightfully dissociated. Sometimes I wish I had leaned closer, back. Then, and other times. But all I ever wanted was to see Henry's eyes turn from blue to green, when he looked at me.

All those windows to peer out of, and find the Shaker spirits, peering in. Hollow faces like shocked children's. I thought, at first, like children staring into a candy store, at the subdued elegance Henry had spread through the house. Later I saw that the faces shone with hatred. Condemnation. Because of their gift to be simple. That's a Shaker song: Hate and condemnation bared their teeth, sharpened their chins, blazed under the straight bangs, the shadowy bonnets. I know the living Shakers were gentle. But these had been watching for decades, while their green valley became the pruned grandeur of Shaker Heights. Limousines, parties for Presidents . . .

Once at nightfall I saw them dancing in the shadows under the branches. Flinging their arms rhythmically toward our house and my window. I heard them wailing faintly, almost whispering, "Woe! Woe!"

Or was it just the wind?

No, they were pointing at me. Hollow round mouths wailing "Woe!" Accusing, admonishing me, for the opulence, the conspicuous consumption. I felt sick terror and guilt; while running to turn out lights, to dash through the dark house, to hide.

I forgot that spirits can see in the dark. And did not know I was running through the French doors, across the patio, onto the lawn, into the hushed and spongy Shaker woods.

Into a circle of gray, transparent, wailing Shakers. At one side long, aproned gowns, and the other, long coats, wide-brimmed hats.

They drew close around me, in my Viyella robe, and stomped, and a sour smell rose from the ground that had been theirs. Their cries were like the scratchy cawing of crows, that still lived near.

"Damn your devil!" they cawed. "Damn your devil!"

Then each drew up a knee, almost to the chin, thrust forward an arm as if aiming a rifle, and stomped the foot while emitting a sharp bark, in imitation of a gun shot.

There was a long scream, mine. I knew this was their "shooting the devil" ritual. It was used in the Great Shaker Revival, to drive the devil from disbelievers. Was I possessed of the devil? Did I require chastisement from the sinless Shakers?

I ran screaming across the lawn and into the house, and locked the French doors and closed the windows. Somehow I reached the bedroom and dived in the bed. But even with the heavy draperies drawn, and under the down cover, was I safe from them, who had slept on rope beds and hung their clothes on pegs? Could they come up here? Might they come at any time, to shoot my devil again, if necessary?

I knew the Shakers abhorred the devil, who brought sin in the form of the serpent to Adam and Eve, and caused perpetual sin. Did you know the Shakers called the devil the illegitimate father of the human race?
I wanted the dog, but it would never come to sleep with me. It was as bad as Henry. It stayed down in the library, waiting for Henry, listening for the Shakers. When I spoke it barely glanced at me, its yellow eyes half-closed.

I think I lay awake all night. But no Shakers came, and next morning Henry was at breakfast, smiling blue-eyed. He had slept in the guest room so as not to disturb me. What he always said. I said I was disturbed anyway, and tried to tell him about the Shakers. Henry said nonsense, that imagination of yours. Take a walk, get some air. Take the dog along, and stop letting your imagination wander. He said, on second thought, maybe you need to get away. You stay home too much. I'll arrange a trip for you. I can't make it right now, but it will do you good. I shrieked that I couldn't leave now! I had to stay, to find out — Didn't he understand? All right, Henry said, suit yourself. But, he was sorry, he'd be late again tonight.

Henry was traveling everywhere, sort of an ambassador for Cleveland, to offset the jokes and the bad image. For corporate clients, you know. And he was the perfect envoy — so handsome, so smooth and articulate. During the worst financial crisis he did stay in town and make more speeches locally, reassuring the community, after those crass attacks by that impossible mayor. Speaking soothingly in his warm, sexy voice. This was why Henry was going to be Senior Partner. It wasn't enough, any more, to know the law, and act polished and look distinguished. Today, you also had to be sexy. Henry, the quintessential sexy law firm partner.

So I was alone, wandering through the house, fighting off guilt. But guilt for what? Why was I so hated by the Shakers?

I tried not to look out windows. If I didn't look out, they might not look in. Instead of windows, I looked in mirrors. The Chippendale in the dining room, pier glass in the hall, girandole in the bedroom. All selected by Henry. For the Senior Partner-Designate's home. Although we had made the down payment by selling some of my Grandfather Eddie's Standard Oil of Ohio.

For a while I tried to go with the house. To be the Distinguished Barrister's wife, for Henry. But there was always the dissociation. In spite of the Junior League training, I'd get tongue-tied, or my mind would wander. Greet people by wrong names, record wrong facts when calling telephone lists. That's what they assigned me: telephone lists. Even on committees where there were no other League members, nobody ever suggested me for chairman. God forbid, anyway. I never wanted to be chairman, of anything. But I was never once asked.

In every damned mirror, now, I looked pale. Watery. My eyes, that once flashed — wild and wanton, that other handsome doctor said — looked lost. Like Shaker women's eyes. The books mentioned their "haunted" eyes, their "sickly hue," and "rapt, unearthly complexions."

Did I look the same for the same reason? Continence? Prolonged abstinence? Without the shaking and dancing for release? I had become like a Shaker sister. While Henry had become smoother and sexier.

I should have known about Henry. I did know. It wasn't speaking engagements, not all those nights. I didn't want to know.

All I wanted to know was about the Shakers. What would they do next? And had they finished with me?

 Nights, with the draperies drawn, I would drink scotch and water and read myself to sleep — Agatha Christie or Daphne du Maurier, she's not bad. I didn't watch TV or phone anyone, not even Deedee, who's stood by since Hathaway Brown days. I'd stopped having live-in help, and didn't want Deedee or anyone to know how much I was alone in that house. Or who was outside.

How many nights later? I was by the bed in my nightgown, with my book and drink. In the mirror I saw her behind me. Sister Emmaliza. Her spirit.

Blue-white gown, a scarf-cape covering any possible non-flatness. Face the "sickly" hue. Eyes condemning, and fanatical.
I could not move, nor scream. She smiled, the smirking smile, and held up an imperious finger. She, a True Believer, was honoring me with her presence. She whispered, so much worse than speaking aloud: “I am Sister Emmaliza, come in holy love. Do not fear.”

But I did fear.

“New manifestations,” she hissed. Her eyes rolled upward, responding to the marvelous secret. “New manifestations, coming!”

I tried to nod. Maybe she would go, now that I knew the secret. She still smiled. “Heavenly visitations, like those in times past. A new time of the visions is coming!”

I shivered. Like the “visions” and “special manifestations” that stirred all Shaker communities, at the time the colony flourished here, in “the Valley of God’s Pleasure.”

“We must purify!” she hissed, eyes rolling terribly.

I remembered about the purifying. The scrubbing-and-sweeping dances, the scouring of Shaker grounds and buildings. The pantomime bathing, the mortification rituals when they impersonated animals, to humiliate themselves. The songs decrying “nasty flesh,” and the “warring” against “natural sinfulness.”

She pointed at me. I cringed. “You must be ready!”

“Me?” I could barely whisper.

“All of the Shaker village must be cleansed.”

“You mean — all of Shaker Heights?”

“Yes. Purified of lust. Of carnal knowledge!”

“All over . . . all of Shaker Heights?”

“One must start with oneself.” She pointed at me again. “With you . . . you must refrain.”

“Oh! . . . actually, I do —” She probably knew this anyway. She and the whole damn Shaker commune. Suddenly, I understood what had gone wrong in this bedroom. It had been the will of the Shakers.

“What about your husband?”

“Well . . . he is away a lot —”

“He must be purified!” Her eyes were like pale marbles. “I shall be waiting, heedful. The sistern and brethren shall be heedful.”

After she was gone, the dog ran through the bedroom, where it never came. Its feet pattered in, out, and I heard it running through the house, without barking. There is something especially horrible about a running dog that does not bark.

Henry did not come home until almost morning. I was awake, between cold sheets, when I heard him go into the guest room.

Yes, Henry needed purifying.

In the days that followed, I felt Sister Emmaliza’s presence constantly. Her heedfulness. She didn’t have to worry about me, though. Every day, in all the mirrors, I looked more wan, more pallid.

But I felt a frantic, rushing need to know about the spirit visitations. A need to be forewarned. I went to the museums, to the Western Reserve Historical Society, and read in their libraries. I had to know, to find the Sacred Grove — the ground, you know, ordered by Mother Ann’s spirit. The ground marked with the Holy Stone, which was to be buried, if necessary, to keep it from the hands of non-Believers.

In New England those holy grounds were on mountain tops. Here the Sacred Grove is shown on old maps, and one book said it is surrounded now by gracious homes. Another book had a photograph showing it maintained as lawn. Then, an expert at the Nature Center said the Grove had locust trees at each corner, and that one locust still stands.

I had to find it. I couldn’t wait. Henry would not be home for dinner, and I went rushing out, to search, although it was a drizzly late afternoon, and mist was thick around the house.

The dog plunged into the mist. It seemed to know, that day, where to go. I unfastened
it from its leash and followed it, hastily, through trees, behind a rusty brick mansion, and into an open space. A place dim and soupy with gray-green light, under soggy branches.

Yes. I knew it was the place. The Sacred Grove. With a Holy Stone buried somewhere underfoot. With green haloes around the trees, scratchy overgrown shrubs. Here the Shakers had danced and sung and mortified themselves.

I found the old locust tree, in its misty halo. And heard a long, hollow, awful cry. The dog lay, flattened, on the damp ground by the tree’s roots, shaking. The sound had been the dog’s howl. It stayed there, flattened, although I begged it to come.

Then I felt myself being whirled, dizzyingly. Misty shapes were around me, and I heard whispery singing.

I may have screamed, but I heard only the singing. The eerie singsong Shaker tune. I was thrown down, was rolling on the ground like a log, and gasping for breath. I could not stop rolling. The force was irresistible.

I knew I was seized by the spirit, as at revival meetings. Then, I was being humiliated. I was on all fours, barking like a dog. And our dog ignored my humiliation. It lay still, nose down.

I was being pulled to my feet, and screaming, and jerking sideways. My head was bobbing. I had no control of hands, arms, legs.

Then, flailing and jerking, but looser, wilder, I began to feel a glorious exultation, a release.

At last I stood quietly, drawing deep moist breaths. I had been mortified and purified. I felt the mist on my face, and tears running down. The sistern smiled faintly, and the brethren nodded. They began to dance away, in separate circles, their soft singing fading in the haze.

I moved toward home, the dog padding silently beside me, through the gentle drizzle. I slept. Tranquil, purified, chastened. I did not dream of the Shakers, nor of Henry, but of golden balls, entwined leaves, and flowers.

Purity. This is what a person needed. Oh, how could Henry be purified, too?

I was awakened from the dream. The dog had run through the room. I knew Sister Emmaliza was coming. My sister, now!

But she did not radiate sisterly love. Eyes like glass, she looked about the room.

"Why do you indulge yourself with luxury? Sell it and live simply! Give the money to the poor!"

"But — my husband likes it. He is a law firm partner, you know . . . ."

"He is not purified!" Her hiss was like a lash.

"Yes. Oh, I know."

"This household is my responsibility. This man must be purified."

"But he is so busy, Sister . . . And how can I —?"

"The new manifestations have started. The day of judgment will follow. It will happen this time. The day is drawing nigh!"

"Well — but — How is the rest of Shaker Heights coming?"

She shook her head, with, almost, malicious relish. "There is much greed, and lust. Much impurity . . . ."

"Maybe it is hopeless."

"Not for the brethren and sistern! They will find the way!"

"Well, how can I find the way . . . for my husband?"

"Take him to the Sacred Grove."

She seemed to be gone.

Yes. It could happen to Henry there, too. But, that terrible green mist . . . . How could I go back there, even for Henry?

A few evenings later, I found out how really impure he was. He came home early, the dog bounding with delight, and told me. He sat me down, opposite him, in the chair he’d bought at Sotheby Parke Bernet. Looking across at me, with the eyes that could change color, he said it. A divorce. Quiet, discreet. The firm would handle it. For my sake, he said.
I was still not old. For all his smoothness, he did not say, you are still young. Then, about
the house, he said. He supposed that I would want it.

“No. It’s always been yours, for you. But there is something else, Henry. Something
I’ve always wanted you to do. I can go almost anywhere alone — I’ll have to, won’t I? — but
I can hardly go there, at night. To the Sacred Grove.”

“Why, sure, why not” Henry smiled charmingly. “You know I’ll do that for you. We
may get arrested for trespassing, but I’ll do it.” He looked very relieved, very handsome.

“Right now, Henry.”

We had to hurry, to go before I lost my nerve. And before it got too dark. Night was
falling fast.

We took the dog, leaping at Henry, and then it streaked around us, while we walked,
in all but silence. Toward the holy, awful place.

I trembled as we got nearer. But, surely it wouldn’t happen to me again! I was purified.

Only, please, to Henry.

There were the low trees, the bushes. No green haloes, thank God. The night was too
dark, too clear. And no singing.

But there was a cold hush.

I whispered, “This is it, Henry.”

“This? Here? Well, I’ll be goddamned!”

A shocked rustle shook the grasses and branches. Henry had profaned the Sacred
Grove.

The rustling stopped. Nothing happened.

The dog slunk to the old locust tree and lay flat.

“That’s the original locust, Henry.”

“Yeah? Over a hundred years old, right?” Hearty, charming.

“Sh! . . . The people in that house might hear.”

We paused, silent.

The dog stirred, whimpered. I saw the Shakers, moving around us. I wanted to
scream, to warn Henry, to grab his hand, run.

But I had to stay. Henry had to.

“Well,” he said, briskly, “so we’ve been to the Sacred Grove. Satisfied? But don’t you
come here alone — afterward. OK?”

I could not answer. The Shakers were still, and Henry did not see them.

“Let’s go,” he said. He took my hand. I sobbed, inside. The Shakers were motionless.
Nothing had happened. No manifestations, to save Henry for me.

He led me away from the holy place. I was crying, inside.

Then he stopped and seemed to look down at me, perhaps with concern. Perhaps
smiling, “Want to walk some more? Do us good. Help us sleep.”

My hand was in his remembered, firm grip. We walked back to South Park, and
through the grass along Horseshoe Lake. Across rolling ground where their orchards had
been, and their cemetery — females buried on the north, males on the south, amid pines
and mulberry trees.

Neither of us took our hand away, neither said that we should turn back.

Oh, God, oh, Sister Emmaliza! Maybe it had worked, after all! The sacred place’s influ­
ence on Henry.

But I couldn’t see his eyes, or their color.

We walked toward their dam, which they’d built, making the lake, to power their
woolen and saw mills. The dog circled ahead, in the dark.

Walking like this was almost romantic. Like before we were married. Young lovers.
When just having my hand in Henry’s was joy, and I could not believe what happened to
his eyes.

“You’re quite a gal, you know?” Henry said. But his voice was not a lover’s. Under the
heartiness was boredom, or impatience. Whatever had been under his voice for a long
time.
Henry would not change. Never.
I knew we should go home now. But how could I, when this was our last walk together.
We went slowly along the path across the dam. We stood and looked down at the blackness of the lake, listening to the water streaming into the spillway — the deep, round basin, like a well, rimmed with great cut stones. Still some stones, maybe, that the Shakers had cut. Behind us was the ravine, and the trickling of their mill stream.
Henry leaned far over the wall above the spillway, listening.
“Old Horseshoe Lake. Peaceful. Sound of water’s great for tension, eh?” And he may have turned and smiled at me. But, I knew, with eyes of no real color.
Then, in a rush, came an awesome emanation. The shadows of the sistern and brethren were around him, moaning, condemning: “Woe! Woe!” And black and strong, whistling through me, I felt their fury, and their wrathful judgment of Henry.
In a mighty surge, they did their “shooting the devil” ritual, raising their knees, straightening, stomping the stones that paved the dam. And, arms outstretched, they shot Henry, and pushed him over, down into the deep, enclosed spillway.
The dog howled piteously and leaped in after Henry. But it was too late. There are spikes in the stones above that spillway now.
So here I am, with the Shakers whispering, smiling, around me. And the new manifestations are coming faster, and much stronger, glorious. Shaker Heights must rejoice, and must make ready.
Myself, I am ready, and content, and joyous. This Shaker spirit writing is from Henry.
Candidates control the presidential debates, and winning is all that counts.

During the election campaigns of 1960, 1976, and 1980, Americans watched presidential candidates in joint television appearances labeled “debates.” The formats for these appearances resembled those of classical debates, but in most features they were not debates at all. If the democratic process is to be well served in the future by such televised meetings of presidential candidates, it behooves us to understand what forces are at work in organizing them and what benefits are fought for. Three facts are fundamental to this understanding.

One is that the format — the ground rules by which the appearances are conducted — is all-important. It is the format that determines how well the candidates can protect their weaknesses and exploit their strengths. The second is that the candidates ultimately control the formats. The television networks and the sponsoring organizations may set up the rules but the candidates may veto any of them by refusing to appear. The third fact is that the candidates are not interested in educating the public or in arriving at truth, but in winning the election.

Though most of the published studies of the televised debates have concluded that, on the whole, the debates were helpful to American voters, several criticisms have been advanced. Political pundits, scholars and other critics have argued that format (in the broadest sense), more than any other element, was responsible for the damaging aspects of the telecasts to one or other of the candidates. That Kennedy looked better than Nixon and that how one looked was more important than what one said in 1960 were, it was suggested, partly due to format. Ford’s Eastern European gaffe (1976) and Carter’s revelation that he consulted with Amy (1980) are two more results of faulty format design. Even the most cursory examination of post-debate media reports in the three campaign years displays a variety of criticism on how the debates were presented.

Modern debating practice can be traced back to early Greek notions about public
communication. Greek philosophers maintained that public argumentation required a structure to make it useful to society. The debate format was one structure that emerged. A fundamental assumption behind debates is that true arguments can always be presented more persuasively than false arguments if the situation in which arguments are presented is arranged so that all participants have equal opportunity. Therefore, if two equally matched speakers are given equal amounts of time to present opposing arguments on an issue, an audience should be able to separate truth from falsehood and reach a correct conclusion about the issue. It was believed by the Athenians that debates and the formats which contained them could provide an important tool for decision-making by the public.

Persistent among the several criticisms of the presidential "debates" has been the lack of adherence to classical debate format, though some critics were willing to accept modern adaptations. One important critic, J. J. Auer, isolated elements of a specifically American debate tradition. He suggested that "a debate is (1) a confrontation, (2) in equal and adequate time, (3) of matched contestants, (4) on a stated proposition, (5) to gain an audience decision."3 Applying these criteria to the 1960 telecasts, Auer found that only one fit, that of matched contestants. He labeled the Kennedy-Nixon encounters "The Counterfeit Debates" because they failed to satisfy genuine debate criteria—a criticism that also applied to the Carter-Ford meetings.

Underlying criticism such as Auer's is the sincere belief that only "genuine" debate advances ideals inherent in democratic theory, that the electorate is best served by clear, concise and thoughtful discussions of issues, and that the political process of choosing our leaders is enhanced by the traditional debate structure.

Most critics are realistic about the presidential debate process and its format. In analyzing the panelists' questions and the responses to them by Carter and Ford in the 1976 encounters, another critic, Louis Milic, suggests that it is "naive today to suppose that there is any chance of returning to the rhetorical tradition of the nineteenth century." He argues for minor changes and concludes that "the disappointment with the format, the tinkering with the form, length, and subject matter of the questions, are all in a sense irrelevant... [since politicians have learned] to answer any form of question with any degree of accuracy." A political scientist, N. Polsby, assesses the 1960 and 1976 debates as "notable for their intellectual bareness" and says that they "suggest the possibility that debates are most likely to occur when there is the least to debate about."4

Despite these criticisms and appeals for change in format, the basic design has varied only slightly among the three debate years. Even after Bitzer and Rueter recount the flaws of the Carter-Ford format, they include, among four suggested formats, only one (a Lincoln-Douglas type) which closely fits the American debate tradition.5 The unsatisfactory form of the debates is due to the candidates, who ultimately decide on the format and, along with the representatives from television networks and sponsoring organizations, bring about what may be termed a negotiated format.

THE NEGOTIATION PROCESS

Since presidential candidates are not required to debate, their acceptance of and subsequent participation in televised debates are matters for negotiation. The question whether or not to debate depends on the candidates' perception of their self-interest, that is, getting an advantage over the opponent. Candidates want to get elected. Protestations to the contrary notwithstanding, they are interested in obtaining votes, not in educating the electorate. If a potential course of action is perceived as advantageous, it may be accepted. The test is always "Will this help us win?" It is this concern that dominates all discussions of alternative strategies and actions.

Since the format is always a result of political decision-making, it is difficult to conceive of genuine debate replacing the innocuous question-and-answer programs. Politicians are more accustomed to the press conference format. Candidates are fearful about their ability to perform in a traditional debate, and they prefer to depend on familiar formats with predictable audience response rather than to risk anything unknown. A review of the negotiations for the three debate campaign years reveals how each format (displayed in the Table, pp. 104-5) came about.

The 1960 Debates

In 1960 the television networks wanted to mount the first presidential televised debate in imitation of the Oregon presidential primary debate between Thomas Dewey and Harold Stassen in 1948. In that year, the candidates agreed to debate one issue—outlawing Communists as school teachers. That format provided for twenty-minute opening

Statements by each candidate followed by rebuttals of eight and one-half minutes. Both Kennedy and Nixon rejected that format. They feared it would attract little audience interest. They also believed that no single issue facing the nation was so important as to exclude all others. The head-to-head confrontation (especially, the rebuttals) might prompt one or the other to make a casual remark which could endanger our foreign relations.

The networks and the candidates settled on a format (see Table) that included a moderator and panelists, which in effect, set the precedent for candidate control of format. These debates were variously termed “The Great Debates,” “joint appearances,” “discussions,” and “Face-To-Face” encounters; but the term “debate” stuck.

Political campaigning habits and expectations about the effect of television dominated all other considerations, and candidate self-interest governed the negotiations. The traditional debate format, therefore, was to remain safely in history books, where it could be invoked to give sanction to the current proceedings.


<table>
<thead>
<tr>
<th>LOCATION &amp; TIME</th>
<th>CANDIDATES</th>
<th>MODERATOR* &amp; PANELISTS</th>
<th>FORMAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 7, 1960</td>
<td>John F. Kennedy, Richard M. Nixon</td>
<td>Frank McGee*, NBC Paul Ninin, CBS Alvin Spivak, UPI Hal Levy, Newsday Edward P. Morgan, ABC</td>
<td>No Opening or Closing Statements, End Determined by Clock Alternating Questions to Candidates on any Subject Answers from Candidates (2 1/2 min.) Rebuttal Comments from Opponent (1 1/2 min.)</td>
</tr>
<tr>
<td>LOCATION &amp; TIME</td>
<td>CANDIDATES</td>
<td>MODERATOR* &amp; PANELISTS</td>
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<tr>
<td>Oct. 21, 1960</td>
<td>John F. Kennedy, Richard M. Nixon</td>
<td>Quincy Howe*, ABC, Walter Cronkite, CBS, Frank Singiser, MBS, John Chancellor, NBC, John Edwards, ABC</td>
<td>Opening Statements (8 min.); Closing Statements (4 1/2 min.); Alternating Questions to Candidates on any Subject; Answers from Candidates (2 1/2 min.); Rebuttal Comments from Opponent (1 1/2 min.)</td>
</tr>
</tbody>
</table>
The 1976 Debates

Though the motives and, ultimately, the format in 1976 was similar to that in 1960, a new group of participants, representatives from the League of Women Voters Education Fund (the "League"), joined the negotiation process. In 1960 Congress had temporarily suspended the "equal time" provision (Section 315 of the Communications Act of 1934) in order to allow the networks to telecast the debates without providing the same opportunity for the more than one hundred fringe party candidates. In 1976 Congress was unwilling to use that device. Instead, a series of legal moves allowed the networks to cover the debates as "bonafide news events" under the sponsorship of the League. Throughout the 1976 negotiations that legal decision influenced the various discussions about the inclusion of minor party candidates, the selection of panelists, the role of the networks, and the actions of the sponsors.

Whereas in 1960 the path was cleared by Congress, in 1976 the legal situation was obscure and led a number of minor party candidates to file suits pleading for their inclusion in the debates. These suits, as well as the League's careful attention to operating within the law, prompted its debate negotiators to move in a more "legalistic" manner than they most likely would have preferred. Moreover, the networks were conscious that they had been included among the defendants in the suits. Only the participating candidates were relatively free from "legalistic" constraint. A few examples will illustrate some of the problems which resulted from legal considerations during the negotiations.

James Karayn, debate project director for the League, believed that the evasion of Section 315 had placed the League and the networks in an adversary situation:

"the networks won't stand still, the commercial networks, if we get debates in the Fall. How can we do this so... we don't end up in Court, or [with] somebody invalidating our efforts because we did either a naive or just an outright stupid thing, and somebody would say there was collusion. [Eugene] McCarthy, as you know, claimed there always was collusion between the League and the networks."

For the networks (especially CBS, but also ABC, which served as pool for all networks), three issues predominated, all related to journalistic prerogatives under the First Amendment's guarantee of freedom of the press. These issues were the placement and use of unilateral cameras, the showing of audience reaction shots, and the selection of panelists. All three are actually aspects of format. Although some critics make a distinction between "format" (meaning the ground rules for the participants) and "televised debate" (meaning the production details), in reality these two terms cannot be completely separated.

The right to use their own ("unilateral") rather than shared ("pool") cameras was requested by CBS and rejected by the League, because, Karayn said, many independent stations in Philadelphia (site of first debate) had requested "unilaterals" and they could not grant some without granting all. No unilaterals were allowed inside the Walnut Street Theater proper, though they were permitted in the lobby and in the balcony. Use of unilaterals would, of course, have permitted the various networks each to telecast a different view of the debates.

Audience reaction shots — showing a member of the audience on the television screen either while someone is speaking or immediately after — were requested by the networks. In negotiations between the candidates and the League representatives it was decided that there would be no audience reaction shots. Michael Raoul-Duval, President Ford's special counsel, vetoed the plan because "he felt strongly about [the] real need to move the debate into a more issue-oriented mode... it was politically to his advantage, in his judgment, and that's why we made that decision." Obviously, audience reactions to the debate as it was going on would have added another dimension to the format, but it would also have permitted editorializing through selection of audience shots (such as a snicker or a solemnly respectful expression).

Selection of panelists — questioners — caused considerable difficulty for the League. Karayn, who spent the summer of 1976 developing a plan for the debate procedures, suggested that candidates question each other. After a preliminary meeting with candidates' representatives in late August, Karayn realized that the head-to-head format suggestion might not be acceptable. He held meetings separately with candidates' representatives, but to no avail: the candidates did not want to question each other. The risk of being perceived as badgering the opponent, and the impression that the President was being attacked, were two of the reasons offered for not debating head-to-head.

Karayn asked the League debate steering committee to develop a list of potential questioners, to select from among the list those the committee felt would be acceptable.
to the candidates and to announce the selection to the candidates' representatives. These countered with the candidates' proposal that they be permitted to suggest panelists. Eventually, the League agreed to allow the representatives to submit a list of no more than fifteen names in each category of print, broadcast, magazines and wire services. The same would take place for each debate. The candidates' lists were combined with the League's and selections were made. Though the League insists that it alone made the final selection, the process raised both legal and journalistic issues of collusion.

In de-briefing sessions which followed the debates and in interviews with representatives of the League, candidates and the networks, it became clear that the most notable aspect of the negotiations was control of the process by the candidates. The effect on the 1976 format cannot be overstated.

There can be no question about who has the veto over major format elements. It is the candidates. During the discussion between Ruth Clusen (president of the League) and Elliot Bernstein (senior special events producer for ABC) and Michael Raoul-Duval, President Ford's representative, it was asked whether the candidates could veto the panel. The answer of Raoul-Duval was yes, because "ultimately we could pick up the marbles and walk out": they had final control over whether or not there was to be a debate. On the other hand, it would have been very difficult, if not impossible, for the networks to exercise a veto on a debate; once the candidates had agreed to debate, it would have been very difficult for the networks not to televise.

The message is clear. Power over format ultimately resides in the candidates' camps. The same is true of audience reaction shots, which have long been part of television journalists' craft.

Unlike the debates of 1960, those in 1976 had both a sponsor, other than the networks, and a live audience. Also, since the event was to occur under one of the Section 315 exemptions (as a bonafide news event) and since the audience in attendance was in fact part of the event, questions of audience coverage, the networks believed, were theirs to decide, not those of the participants in the event.

Ford's debate advisors did not want an audience. They thought it might interfere with the President's concentration and distract him from looking directly at the cameras and the panelists. Ford's legal advisors, however, thought that the audience would make the status of the "bonafide news event" believable. The League and the candidates agreed, however, that no audience reaction shots would be allowed. The networks, of course, were quite disturbed by that decision.

Bernstein, Barry Jagoda, Carter's television adviser for the debates, Robert Chandler, vice president of CBS News, and Raoul-Duval revealed their positions during the de-briefing conference:
Bernstein: It was... a very important matter of principle for us.... As special events producer in the last 13 years, I have never been in a situation before where we were told, once we were given permission to cover something... where we can point a camera and where we can't... This is something that lots of people would like to tell us to do....

Jagoda: [Our goal was to get] an opportunity to have substantive agreements and disagreements between the two candidates expressed to the American people.... The question of the audience was just a technical detail. There was no principle involved for us.

Chandler: We were put in a position that was intolerable to us. Had we gone to Russia and shot some sort of event there, and had the Russians said, you will not shoot in this direction, everybody would have been horrified. And yet, here we are in the same kind of position, whether we want to take pictures of the audience or not, we've been invited to cover a news event and suddenly we're told that we cannot cover part of that event. Now, that is a matter of principle and it is quite important to us, and it was an intolerable situation. As a matter of fact, we suggested, rather than put us in this position, why don't you drop the audience. [The League] said, no, we have a tradition of audiences and we don't want to drop the audience.

Raoul-Duval: That audience was a fiction, in my judgment. We did not want the audience. We wanted to negotiate away from it, and we accepted the audience not because it was the League tradition... We said yes to the audience only because of the position of the lawyer... So that audience was, in essence, there as a legal fiction.

Other than wide-angle shots of the audience before and after the debates, there were no audience reaction shots in 1976. Questions of format are affected by the presence of an audience, if only because this introduces another element in the negotiation process — another consideration for candidates, sponsors and networks to work out.

As Raoul-Duval pointed out, the only factor that could alter candidates' decisions was public opinion. Public opinion, however, exercises more influence on candidates' decisions whether to debate than on their views about format. Pollsters, columnists, and the news media generally, conduct and report poll and survey findings about the presidential race. Press access to information on the campaign trails is abundant. Whether or not debates will be held is a constant topic in media reports. Candidates are regularly asked about their intentions. Candidates and their advisers must respond because public opinion usually mounts in favor of presidential debates. That was a significant factor in 1980.

The moment the debates are announced, negotiations are enveloped in secrecy. Agreements are made about what can and what cannot be released, either officially or off the record. Public opinion could hardly influence the determination of format, since little is publicly revealed about it until the negotiations are completed. Both from the candidates' point of view and from the League's, it would be bad publicity to let the public know that candidates have control over the negotiations, and furthermore that they are even able to keep the fact of that control a secret. The following transcription from a debriefing session after the 1976 debates makes clear that all parties had agreed to withhold certain aspects of the negotiations from the public.

Raoul-Duval: Well, do we have an agreement and our agreement is no longer binding? (Laughter)...
Peggy Lampl (League executive director): We had an agreement about the negotiating—

Cilien: That we would not talk about it and we didn't.

Raoul-Duval: I want to bring that out. It obviously is not for you or any other single person around this table to abrogate an agreement which three parties, the League, representatives from Mr. Carter and representatives from Mr. Ford agreed to, but we did have an agreement... and that is, we would not characterize the process of selecting the panel. I assume it is in everybody's interest that that is over with now.

Clearly, the 1976 experience reveals how difficult it would be to persuade candidates to participate in traditional, genuine debate. Even if the force of public opinion were on the side of genuine debate it is doubtful that such would occur. Anticipating the possibility of debates in 1980, George Will in a broadcast made a case for "real" debates:

In 1976, in the first debate between Ford and Carter, the audio system failed, and both men stood there like stump for 27 minutes, not exchanging a word. Some people considered that silent stretch the intellectual high point of the campaign — for 27 minutes, neither man was misleading the nation.

Will cited recommendations in a Twentieth Century Fund study that in the 1980 debates candidates should address arguments and questions to one another. He continued:

True debates are rare. What goes on in Congress is usually mere declaiming, not debating — not the cut and thrust of people developing and defending arguments. And the 1976 "debates" were not real debates, they were more like joint appearances on "Meet the Press," or like parallel, simultaneous press conferences. We have enough press confer-
ences during campaigns. We need what true debates can provide—a sense of how candidates can think on their feet, how—or if—their minds work when they are not programmed for a controlled situation. The debates should minimize the role of journalists as interrogators. Candidates should argue back and forth, with only minimal control. Increasingly, campaigns consist of 30-second commercials and other prepackaged episodes. Real debates would force candidates to think in public, to think without scripts. Such debates might be a dismaying spectacle, but it is better to be dismayed about politicians before rather than after an election.13

The 1980 Debates

[Much of the material for this section was obtained through interviews and observations by the senior author as he witnessed the preparations for and attended the Baltimore and Cleveland debates.]

The election of 1980 has been characterized as volatile. Throughout the primary period, public opinion polls depicted a vacillating electorate. Shifts in voter intention were of such magnitude that, for example, Bush climbed from some eight percentage points (Reagan had 50) in September, 1979, to 45 points in January, 1980. He moved ahead of Reagan, who dipped down to 36; in those four months, Bush gained 37 points while Reagan lost 14. Between Bush's victory in the Iowa caucuses and the time just after the first debate in New Hampshire (less than a month) Reagan regained the lead, and moved ahead significantly to win.

In the Democratic primary, Carter and Kennedy had similarly been engaged in campaigns which alternately faltered and plunged ahead. The electoral outcomes were generally unpredictable from primary to primary. Kennedy, behind in the polls, challenged Carter to several debates. The President, well ahead, refused each challenge. Inflation and unemployment were on the rise, however, and when the polls reflected an impatient electorate, Carter reconsidered and accepted a debate with Kennedy during the Iowa primary. When the American hostages were taken in Iran and public opinion moved quickly to support the presidency (as it usually does when our country faces a foreign crisis), Carter moved quickly to postpone (cancel) the debate with Kennedy.

The Baltimore Debate. The three-way race to the presidency in the general election made more complex what was already a campaign filled with critical events. John Anderson's candidacy—good for Reagan, bad for Carter—made difficulties for the League, which, once again, sought to sponsor debates. Anderson, running as a Republican in the primary, switched to an Independent candidacy for the general election. The League was prepared to extend debate invitations only to Carter and Reagan, but had to consider rising public support for Ander-
son’s inclusion. They decided to rely on his standing in forthcoming polls as an indication of his qualification for participation.

On September 9, the League announced that Anderson’s standing in the polls demonstrated “significant voter interest” and that they had invited the candidates to a three-way debate. Reagan and Anderson accepted, Carter declined.

Thus the candidates’ strategies toward the debates crystallized, as did the League’s own position. Reagan and Carter both knew (from their survey reports) who would benefit from Anderson’s participation in the proposed debate. Reagan felt he had much to gain, and Anderson, of course, had nothing to lose. Carter, slipping in the polls as the economy lagged, and with the Iranians recalcitrant as ever, wanted to debate Reagan first. He would then consent to a three-way debate. Reagan refused to debate without Anderson, saying that it was not his place to “uninvite” a participant.

The League’s position was forced — it could not alter the invitation. Other potential sponsors (e.g., the National Press Club) emerged, suggesting Reagan-Carter debates in a variety of formats. Carter was determined in his refusal to participate in a three-way debate. The League made plans to hold the debate and include an empty chair. With considerable pressure from the local Leagues throughout the country and from Democratic Party officials, the League withdrew the empty chair four days before the Baltimore debate. The debate program given to members of the audience, however, included Carter among the “invited candidates.”

Earlier (September 15) Reagan and Anderson representatives met with the League for two and a half hours to make arrangements for the Baltimore debate. Among other elements of the format (see Table), it was agreed that each candidate would be allowed to question the other; responses would be limited to one and one-quarter minutes. In last-minute negotiations, however, candidate-to-candidate questioning was eliminated from the format.

Once again, the League generated a long list of potential panelists, and again, the selected panel was composed of journalists. In 1976 and 1980, the League toyed with the idea of including non-journalists — experts in various fields — as panelists. Raoul-Duval thought that lawyers and professors were sometimes naive about politics, debating, and the political process. Harriet Hentges, the new executive director of the League and a member of the League’s 1980 debate negotiating committee, provided a significant criterion for selecting journalists, instead of experts, for the Baltimore debate. She insisted, “You have to have some feeling for ... the person’s knowledge and ability to act in that sort of performance” (italics ours). It was not an accident that Barbara Walters appeared in two debates — as moderator (1976) and panelist (1980), and that Howard K. Smith was the moderator for two debates, 1960 and 1980. Smith was also moderator for the several League-sponsored debates in the 1980 presidential primaries.

Prominent broadcasters dominated the panels in 1960. In 1976, Karayn and the League included more print journalists. Among the 48 moderators and questioners in the presidential (and one vice-presidential) televised debates, 26 of them or more than half have been broadcast journalists. The rest were print journalists; the Table shows the significant increase of print journalists as panelists in both debates of 1980.

The Cleveland Debate. During the period after the Baltimore and before the Cleveland debate, polls reported a slight lead for Reagan, with some experts anticipating a very close outcome. Just a few days before the Baltimore contest, the League, hoping to entice Carter to enter that debate, invited Carter and Reagan to debate in Cleveland without Anderson. A previously scheduled debate in Louisville was cancelled; four had been planned originally.

The League had two teams, one in Washington and the other in Cleveland, diligently trying to salvage an already disappointing debate schedule by mounting the Cleveland debate. Carter, midway in the period, accepted the debate invitation. The Washington team worked behind the scenes, trying to induce Reagan’s representatives to accept. Reagan agreed to debate.

Ed Hanna, busy with the League’s preparations in Cleveland, was asked if he thought that the League could bring about a format similar to that in the Chicago and Houston Republican primary debates, both of which had been wide-open, free-wheeling debates, with candidates asking questions of each other. He didn’t “feel that the candidates would buy it. Certainly Reagan won’t.” It was once again apparent that the format would follow precedent. In this case, Reagan’s advisors were against direct questioning by candidates because they didn’t want the voter-viewer to feel that their candidate was badgering the President of the United States.

There was a dispute between Reagan’s
advisers Ed Meese and Jim Baker about accepting the debate invitation. Baker was convinced that Reagan’s acting ability and his personal manner would give him an advantage in a televised debate. Baker’s advice to Reagan on the night of the debate was couched in one word; as Newsweek reported it, “Baker handed Reagan a 3-by-5 card with one word on it: ‘Chuckle.’ When Carter began criticizing him, Reagan chuckled, adding, ‘There you go again.’ The reply defused Carter’s attack.”

Posturing and role-playing are inevitably part of the debate preparations which candidates and their advisers ritually perform. Both Carter and Reagan rehearsed aspects of their debate performance. Each anticipated the other’s reactions and possible tactics during these rehearsals.

Format negotiations were based on strategies designed to win the election. Though the League pressed for elements of genuine debate, the candidates would have none of them. Finally, in the long negotiations, the League came up with 22 names for panelists. Again the candidates had a veto over those they opposed. Essentially, the negotiations created a format modeled after the 1976 debates. Though some of Carter’s public statements seemed to suggest a free-wheeling debate with candidates questioning each other, neither his nor Reagan’s representatives would accept such a format during the October 20 negotiating meeting in the League’s Washington office.

The Cleveland debate was the culmination of a series of critical and sometimes unforeseen events, some of them created by the campaigns, others, such as negotiations for the hostages in Iran, arising independently of the campaigns. Accompanying the Cleveland debate was the Anderson “debate” on Cable News Network fed to PBS stations. One-person “debates,” at times with empty chairs, are at best political statements and at worst make a mockery of political debating.

Carter’s and Reagan’s debate performances were measured in terms of “who won” in the media reports and academic studies which followed. All political debates are ultimately measured that way. It is a simple linear relationship between campaign events and winning the election. This simple relationship stands in the way of those who would like to move in the direction of genuine debate.

GENUINE DEBATES: COULD THEY MAKE A DIFFERENCE?

The question, “Will candidates participate in genuine debates in future presidential campaigns?” must be answered today with a decided “No.” Should they? Would it make a difference if voters could watch a debate structured according to contemporary rules for real debates? Would voters obtain more information from genuine debates than from the present encounters? Probably not.

Current evidence shows that voters want debates, watch at least part of them, learn about candidates and issues from them, and more and more make their voting decisions by them.” For the highly educated, for some active political observers, and for rhetoricians, debate coaches, and lovers of language, how debates are structured makes a difference. Such people have developed an
understanding of and appreciation for the form. High school and college debaters who use modern debate formats are enthusiastic about the merits of formal debating. The audiences for such debates receive them enthusiastically.

But would it make a difference to political candidates? Would an imposed structure force candidates to elevate the public interest above their own private interest in being elected? Would candidates reveal things about themselves and their views on issues which they are otherwise unwilling to reveal? Probably not. Debates must be viewed as a part of a larger political campaign system whose deficiencies cannot easily be separated from its strengths. Improvement of the debates is only one of many reforms needed to make presidential campaigns more useful to voters. Questions concerning debate formats are minor compared to the whole issue of the role of modern mass media in campaigns. As Harold Lasswell has said,

Given the presently prevailing institutions of the American Polity, we must not overlook the possibility that a true debate between presidential candidates would threaten the genius for ambiguity that is essential to the operation of our complex, semiresponsible, relatively democratic system of multigroup coalition. The implication is that the introduction of "genuine debate at the top" on TV calls for simultaneous changes elsewhere in the effective practices of American government [italics ours].

A clear responsibility exists for all involved groups, including the League, politicians, and critics, to make useful, practical changes in debate format. For example, we see no reason why candidates should not be allowed to (1) correct errors as the debate proceeds, (2) bring notes and documents into the debate, (3) use visual aids, as appropriate, and (4) relax in a comfortable setting. We support such improvements. But meanwhile, presidential televised debates in their present form will serve the electorate better than none.

NOTES


5 Bitzer and Rueter, pp. 225-250.


7 Ibid., p. 134.

8 Ibid., p. 139.

9 Ibid., pp. 114-117.

10 Ibid., pp. 142-147.


BACK MATTER

Patrick J. Amer

DIGITAL IS NOT THE ANSWER

In the last issue of The Gamut, Albert Petrak provided readers with an introduction to “digital” recordings, together with some history of the development of the technique. While A.P. does not commit himself in the Gamut article to a critical judgment of the quality of digitally recorded sound (he implies that the “golden age of recorded sound” is coming, but it isn’t quite here yet), his critical appraisals of specific digitally-encoded recordings in his Your Basic Classical Record Library leave no doubt that he has been bowled over by the Telarc digital recordings: “flabbergasting sonically,” of Handel’s Royal Fireworks Music; “a tour de force with no rivals sonically at this time,” of Moussorgsky’s Pictures; “clear and obvious advances in sonic detail . . . shade its predecessors handily,” of Stravinsky’s Le Sacre du Printemps; “staggering is the word for it sonically,” of Tchaikovsky’s Fourth Symphony.

A.P. is far from alone in his enthusiasm for digitally-encoded records. The commercial audio press has been uncritically enthusiastic, with rave reviews of the sonics (at least) on digitally-mastered recordings from every major label. The major recording companies are releasing a larger and larger percentage of their new recordings in the digital format; indeed, in November, 1981, London (Decca) Records retired their analogue tape machines and announced that all future releases would be digital. And, in the midst of a serious decline in sales of classical records, digitally-mastered records have been moving quite smartly through the record stores.

Is, then, the golden age of recorded sound about to dawn? Unfortunately, it is not. It is my view that digital recording, both in the present format (digital taping and mastering to produce an analogue disc) and in the completely digital format which will come (digitally taped and mastered digital discs, to be decoded by your new home record player), is a major step backward in the reproduction of sound. Moreover, the record companies and recording equipment companies are about to agree on industry-wide standards for digital recording which will restrict the industry to the present severe technical limitations on the quality of digital recording for the next decade or more. Lovers of good sound will search out small recording companies still using analogue techniques, and will haunt the used record stores for high-quality analogue recordings from the 1960’s and 1970’s; the golden age of recorded sound.

Why am I convinced that digital is a disaster for the lovers of serious recorded music? It started, as most firmly-held convictions do, with a personal experience. I had acquired the Cleveland Orchestra’s recent digitally-mastered recording of Stravinsky’s Le Sacre du Printemps, a Telarc recording, and I sat down to listen carefully to it. I had read, in the audio press, that this was considered one of the finest records ever made, and certainly among the best of the new digital records. So I expected a real treat.

The introduction of Le Sacre is scored almost entirely for woodwinds. The instrumentation is exceptionally dense, requiring piccolo, three flutes, alto flute, four oboes, English horn, soprano clarinet, three clarinets, bass clarinet, four bassoons and contra-bassoon. At one point in the score, the woodwind section alone is playing nineteen separate parts. In recording this kind of music, it is of critical importance to get correct reproduction of the overtones of the woodwinds, for that is what enables a listener to distinguish one instrument from another, and thus to hear the complex sonic fabric in detail rather than as a homogeneous blend. When I listened to the introduction of the Telarc Le Sacre, I first noticed that the surfaces were silent and that the sound was clean and clear; then I noticed that I could not tell what instrument was playing. The opening bassoon solo didn’t sound right; the English horn lacked the distinctive nasal English horn sound; and the oboe was virtually unrecognizable. The problem became more acute when two or more woodwinds were playing; identifying the second or third instrument was very difficult. I listened carefully to the same passage on three different analogue recordings of Le Sacre. On all
three, including a 1957 London recording, the recorded sound of the woodwinds was truer to the correct timbre of the instrument.

There are other problems with the Telarc Le Sacre, which I also attribute to the digital process. Pizzicato strings sound wrong; horns are muffled; bowed strings sound dull, harsh and occasionally sour; and orchestral tutti are homogenized and flat. Only the trumpets, the lower brass and the percussion sound natural. I have heard similar problems on many other digitally-mastered discs, enough to be reasonably satisfied that their source is the digital process itself. Several reviewers have noted similar deficiencies in digital discs in general: loss of detail in woodwinds and lower strings, dryness, and metallic edges on the sound.

What is happening here? Digital mastering has been advertised as a major advance in recording technology. Does it bring with it new and different forms of distortion? The answer, I have discovered, is not only that digital mastering technology, in the formats which are currently being standardized in the recording industry, distorts the music, but that the causes of distortion are built into the format itself and cannot be avoided by the most careful recording technique within the format.

Albert Petrak’s article reviewed the elements of the digital process: simply put, the amplitude of the audio signal is measured (sampled) at a sampling rate, 50,000 times per second (50 kHz) on the Soundstream system used by Telarc Records; this amplitude is rounded to the nearest whole number on a scale of 1 to 65,536 (2^16); and the resulting sample 16-bit number is stored on tape. After this tape is edited, the encoding process is reversed, a master lacquer disc is cut, and the record is manufactured in the normal way. Each step of this process contains technical problems the solutions to which assure that the resulting audible sound signal will be distorted. I am not an audio or electronics engineer, and I simply report here the problems which knowledgeable audio and electronics engineers who have studied digital recording technology have described.

1. Anti-aliasing. The mathematics of the sampling process are such that a wave-form can be recognized and recreated from a series of numbers only if it is sampled at least twice in one full wave. Thus, if a 20 kHz wave (about the upper threshold of human hearing) is to be captured, the sampling rate must be at least 40 kHz, or 40,000 times per second. At 50 kHz, the sampling rate is more than double the frequency of what is assumed to be the highest audible note. So far all right. But a corollary of this sampling frequency rule is that any note (or harmonic overtone) whose frequency is over one-half the sampling frequency (the Nyquist frequency) will, unless filtered out, come back into the music as a lower note, probably in the audible range, and most probably enharmonic with the music. No, it doesn’t come back as noise; it comes back as a wrong note. Because of this corollary, it is essential that all sounds above the Nyquist frequency be completely filtered out — that is, the sound level must be reduced 100 dB or more at the Nyquist frequency. This is done with an anti-aliasing filter.

Now there are filters in your home audio system: e.g., bass controls and treble controls. These generally operate at a 6 dB to 12 dB per octave rate, although some more complex filters will cut the sound at 24 dB per octave. With a 24 dB per octave filter, one would have to start the filtering action at 1.5 kHz to be down 100 dB at 25 kHz. But 1.5 kHz is well within the upper midrange, less than three octaves above middle C, so this is not an available option. Instead, the digital engineers use complex filters which start their filter action much higher in the audible range. Of these complex filters, audio designer John Curl has said: “The filters that are put in would never be used in an audio system under any other conceivable conditions. You just don’t use eleven- or twelve-pole elliptical filters in your audio system, analog or otherwise. They ring, they overshoot, they have phase and time delays.”

Mr. Curl, and others, have recommended doubling the sampling rate, from 50 kHz to 100 kHz or more. While digital sampling systems could not handle this five years ago or more, when digital recording systems were first introduced, such sampling rates are, I am told, well within the technology today. Yet at the Audio Engineering Society convention in New York in Novem-
BER, 1981, the Digital Standards Committee proposed, as an industry-wide standard, a 48 kHz sampling rate with 16 bit encoding — lower than that used by Soundstream and Telarc.  

2. Quantization. 65,536 discrete levels sounds like a lot, and it is. But bear in mind that this capacity must be reserved for the loudest fortissimo on the record. Most of it is unused most of the time. Material near the threshold of audibility, such as the last reverberation decaying into silence, may be encoded with only two or three bits. At this point, the “rounding” to the nearest available binary integer can affect the sound. Several audio writers have suggested that the number of available bits be increased from $2^n$ to $2^{20}$; indeed, it has been suggested that digital systems would need 24 bits of quantization and a 100 kHz sampling rate "to get somewhere near the full capabilities of analogue."  

3. Tape dropout. In the editing process, the original digital tape made at the recording session is at least once, and usually two or three times, read out into an editing computer and rerecorded onto digital tape. In theory, binary numbers are being read out and, after editing, read back onto tape, and no information is lost. This is one of the major advantages claimed for the digital process in comparison with analogue, where some detail is irretrievably lost and some noise introduced in every tape-to-tape transfer and mixdown. Yet several sources have reported that recording engineers who have actually done editing and mixdown with digital equipment have almost uniformly found audible degradation of the audio signal in every digital tape transfer.  

The producers of digital recordings are of course aware of these problems, but they believe the distortions they inevitably cause will be inaudible or unnoticeable. The record-buying public’s reception of digital records, and their reception in the mass-market audio press, have so far borne out this view. My own view is that these problems cause audible and quite objectionable distortions, and a number of audio writers and reviewers have been increasingly expressing this view. Which is correct? This question you can decide for yourself. Listen carefully to one or a few digital records, comparing them with good analogue recordings (preferably European pressings) of the same works. Listen particularly for accurate reproduction of woodwind color and timbre, and for the ability to distinguish one woodwind from another. Listen to the strings: whether they sound warm, airy and sweet, or wiry, dry and sour. Listen for hall reverberation and ambience. Is it natural? Can you place the instruments and visualize the hall in which they are playing? If you hear what I hear, you will conclude, with me, that digital is not the answer.

Will the situation be improved with the advent of the all-digital system predicted by A.P. and expected by the audio industry? Not likely. The distortions caused by anti-aliasing filters, quantization error and tape dropout during the editing process will remain. We will exchange the distortions caused by mastering, pressing and playing the discs for the distortions caused by the home digital playback system, with additional filtering and the possibility of additional tape (or disc) dropout.

What is the answer? Better analogue is the answer. Good recording technique with minimal microphones; careful mixing and mastering with as few transfers as possible and little or no compression; quality vinyl and pressing. All of these are being done now, but not frequently enough and not by enough recording companies.

Part of the reason for the rapid ascendency of digital is the fact that the pioneers in digital classical records, Robert Woods and Jack Renner, of Telarc Records in Cleveland, were pioneers in good recording technique and good record production. The critical acclaim for their digital releases is due in major part to their superb use of recording techniques equally applicable to analogue recording. Take, for a principal example, microphone technique. Major record companies have generally recorded classical works with enormous numbers of microphones; when the Cleveland Orchestra recorded the fourth movement of the Beethoven Ninth Symphony, Columbia used no less than 38 microphones, with something like 24 tracks of tape. That’s why the record sounds like every singer and player is in his own little box. Woods and Renner recorded the Cleveland Orchestra with three microphones, getting a true stereo, rather than a multi-mono, recording, and avoiding the inevitable degradation of sound caused by several genera-
tions of mixdown. In addition, Telarc has taken great care in its analogue disc manufacturing processes, having the discs cut at the best studios in California and pressed in West Germany.

When an analogue recording is made with craftsmanship and care from start to finish, it is the finest available storage system for music. Some of the European recording companies (EMI and Philips, and to a lesser degree DG) come close with many of their releases. American major labels do not come close, with Columbia regularly taking the honors for the worst records this side of a Vox Box. But the answer to poor musicianship in the recording studio and poor craftsmanship in the manufacturing process is not an inherently limited new technology, but a return to good musicianship and good craftsmanship, and record buyers who insist on good craftsmanship and are willing to pay for it.

NOTES

1Petruk, "Forward! By the Numbers," The Gamut, No. 4 (Fall 1981), p. 77.
10Interview with Doug Sax, TAS No. 20 (Dec. 1980), p. 449 at 452; Sutheim, supra note 8, p. 61.

Patrick J. Amer, an attorney with the firm of Spieth, Bell, McCurdy & Newell, grew up in Cleveland and attended College of the Holy Cross in Worcester, Mass., St. Louis University and New York University; School of Law. He has written record reviews and articles on audio equipment for The Audio Amateur, and he sings in the Cleveland Orchestra Chorus.

LETTER TO THE EDITOR

It was with a shock that I read in Louis Milic's column (The GAMUT, 4, Fall 1981, p. 103) the grossly inaccurate assertion that Big Apple "became attached to New York only around 1972 or 1973 . . . ." After all, Dr. Milic not only is a careful and scholarly man but also was for several decades a resident of Manhattan.

In actual fact, "Big Apple" had attached itself to New York by the early 1950s in at least three subcultures: boxing, horse racing, and music. Among race track people, the term also included Saratoga during the month of August, but among the other two groups it denoted only Manhattan and its penumbra. I can point to a manifestation of the term in print as early as 1954 (QUARTO Magazine, Volume V, number 2, p. 46) in the meaning "New York." Its widespread use in oral English doubtless predated that by five to fifteen years.

Respectfully yours,
Robert Cluett
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Downsview, Ontario
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