continued from page 15

Rota sees a lack of "Sitzfleisch," the stick-to-it-iveness needed for hard work, as an aftermath of the operation. But he contradicts this later, when he mentions that "for about two years" Stan and Cornelius Everett "worked frantically" on the "Super." If this was not Sitzfleisch, I don't know what is.

Another argument of Rota's is that Stan's dressing standards changed from "meticulous" to "visibly careless" after the operation. It should be noted, however, that this change coincided with Stan's move from Europe and New England to the West and that there was a general liberalizing of American customs during the postwar period.

Stan often talked about the operation. He liked to tell how his Polish tastes came to the fore as he lay recovering: Though semiconscious, he insisted that he be served that delicious staple of the Polish diet, potatoes! When I asked him about any aftereffects of the operation he said that within a few months there were none. I have no reason to doubt him.

My own amateur-psychologist insight would be that the operation prevented Stan from giving in to any temptation to rest on his laurels, as he had a perfectly natural need to prove to himself that he was truly undamaged.

"The Lost Café" makes very good reading. However, in view of these factual discrepancies that I was able to identify on the basis of my own knowledge, as well as additional discrepancies and important omissions for which there is no space, it must contain many others and thus should be taken as a portrait of Stan only with a large grain of salt.

KAROL J. MYSELS 6/89 La Jolla, California

ROTA REPLIES: To answer Karol Mysels's criticisms point by point:

▷ "I visited the Ulams when they lived in Wisconsin. I do not remember any impression of Stan 'tortured' and 'at the end of the world' in a 'nonexistent' ambience."

This is a rudimentary misquote of what I wrote. I wrote that the *teaching of elementary calculus* was a torture for Stan. This in no way implies that Stan should have felt "tortured" in Wisconsin. Quite the contrary, he probably felt relieved at

the end of each class.

I wrote that "Madison... was the end of the world for a worldly young European." This is my opinion, not

that of Stan, to whom Mysels mistakenly attributes it. Similarly, the statement that the ambience was "nonexistent" is my opinion, not Stan's. It is physically impossible that Mysels should have seen my opinions of half a century later reflected in Stan's face when Mysels visited him in Wisconsin in the early 1940s.

▷ In objecting to my description of the changes in Stan's mathematical abilities after his encephalitis operation, Mysels writes that "a couple of years before his death, he bragged of still being able to recite the alphabetical roll call of his high school class."

A good memory is a mental func-

tion that is largely independent of mathematical ability. Mysels's episode supports the notion that Stan always had an amazing memory, which is not in dispute. However, even the strongest memory will not help in solving quadratic equations. Cornelius Everett did all the computations for the "Super," while Stan came up with the "ideas" and wrote next to nothing. All the lab reports were written entirely by Everett, and Stan often did not even bother to proofread them. Stan never did sit at a desk immersed in frantic mathematical work, the way ordinary people think mathematicians ought to behave. He let Everett do both the frantic and the nonfrantic work. He did, however, frantically pace up and down the corridors of the Los Alamos Laboratory all day long, talking to everybody and to nobody.

"Lack of Sitzfleisch" and "working frantically" are not logically incompatible conditions, as Mysels mista-

kenly claims.

'Stan's dressing standards changed from 'meticulous' to 'visibly careless.'... This change coincided with Stan's move from Europe and New England to the West."

This is not what I wrote, and it is factually wrong to boot. Stan's dressing standards did not change until after his operation, well after his move from Europe, a change to which Paul Stein (who knew and worked with Stan in Los Alamos, both before and after Stan's operation) bore witness, and a change that I record in my essay.

Contrary to Mysels's perception, "The Lost Café" is not a biography in the pedestrian sense of the word. I fully agree that one can find many failings and a great many serious omissions in it, and I am grateful to those careful readers who have pointed them out to me. I hope to correct as many as I can find in preparing the final draft, to be published under the auspices of the Sloan Foundation. I do not believe, however, that the

draft will benefit from Mysels's suggested changes.

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Grant Grievances and Meeting Merits

Rustum Roy (December 1989, page 97) is correct in concluding that for the cost-effectiveness of US scientific research to improve, the present system of research support must go. If grants were based on past performance instead of grant proposals, not only could the time and effort wasted on preparing such proposals be devoted to research, but also the most money would go to the best researchers instead of to the best "salesmen." Such a system already exists in Canada, where any faculty member engaged in research can get a small grant, but very large grants are virtually nonexistent. In Canada, in addition, research funds do not cover "overhead" and "summer salaries" but must be used for the direct costs of research.

I disagree with Roy, however, about the usefulness of scientific meetings. It is precisely because "the 'literature' has become meaningless as a usable resource" that attendance at meetings has become mandatory. It is through informal discussions with colleagues in the hallways, rather than attendance at the formal sessions, that one is able to keep up with what is going on in one's field.

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12/89

Corrections

May, page 79—The first sentence of the bottom paragraph of the first column should have said that the educational system in the US is highly decentralized.

May, page 117—In Lev Okun's letter, the book by R. S. Serway and J. S. Faughn should have been reference 1, and the book by M. G. Bowler should have been reference 2.

January, page 18—The last sentence of the first complete paragraph on the page should read, "This maneuver enabled the experimenters to use unpolarized neutrons." The second sentence in the second paragraph should read, "This field, which affected only one of the two neutron beams...."