The London Stage Project Lawrence University Appleton, Wisconsin 54911

They have persuaded for to receal the 15IB system at VMoss.

Professor Joseph Donohue Department of English University of Massachusetts Amherst, Massachusetts 01002

Dear Joe,

Got back yesterday. Have been thinking about your problems ever since leaving, and can see no way of solving them as long as the present stance of your computer center persists. I believe the problem is much more serious than you realize.

As you said in your last letter, our common needs dictate cooperation, but the cooperation is all on my part unless the UMAss attitude improves radically. As far as I can ascertain from our talks, they propose a system that is outrageously expensive, disastrously inefficient, and unable to deliver the goods. Worst of all, they propose it with a supreme confidence that makes it impossible to discuss the various options with them. They've got it worked out.

1. Outrageously expensive: keypunching; \$5.00/hour connect time for terminal use; \$100,000 "system analysis and coding".

- 2. Disastrously inefficient. They've an overly-complex and redundant cardoriented syntax that will cost you many man-hours of data entry and errorcorrection. It defies the logic of my article on "The Production of Machine-Readable Text." They also propose that their editing system is as good as SITAR. But it takes three separate commands to locate, correct, and verify a correction with their system. It is line-oriented (cannot call up a whole passage for correction). SITAR requires one command to call up as much as 15 lines of text, correct, and verify the correction. The correction requires no more than two keystrokes more than the actual writing of the correct text, and the positioning of the cursor. Visual control of cursor positioning prevents correcting the wrong place. SITAR is also the most efficient text-entry system that I know of. (See above article)
- 3. Unable to deliver the goods. The point was clearly made that the retrieved unit of the system they planned would be the complete playbill containing the item sought for. If you asked for Garrick's roles you would get

sitt.

Professor Joseph Donohue - 2 September 4, 1974

2500 playbills, each of which contained a role somewhere. LSIB would give you only role, title, date and theatre. Only a system which uses the performance of a role by an actor as the basic unit of data can give you what you want. The "indexes" they plan to make are, like their data entry system, archaic—simple inverted files entirely lacking in the complex simple inverted files entirely lacking in the complex interlacing of pointers that typifies modern data bases. In other words, the indexes, though they will speed up retrieval, are nothing spectacular.

If the University of Massachusetts facility is to be any use to you, they must implement SITAR, and at the very least relieve you of the \$5/hour connect charge. It would cost you \$200/40 hour week just to use a terminal on that system. The connect time charge is there to prevent people from hogging terminals. But hogging a terminal or two is an absolute necessity for a project like yours, and this really punitive charge should be omitted in your special case. You ought to go over the computer center's head about this (about everything) and discuss your whole project at least at the vice-presidential level. They should also be ready to implement the London Stage retrieval system (if it can be released to you). They have shown no inclination whatever to consider these options and their doubts about feasibility are entirely unconvincing.

Here is cheaper, more efficient, and capable procedure. I am not in a position to promise a thing, but we must consider alternatives to the UMass solution.

- 1. Separate the Information Bank from the two research projects, putting it under an independent executive board composed of equitable representation from both projects, and some neutrals.
- 2. LSIB makes available to you SITAR, UMass's type of indexes to your data, and programs for retrieving from them, written in BASIC (cost about 3 month's programming?).
- 3. You implement these on the UMass computer. OR.....
- 4. You buy your own PDP11 and they are already implemented because they are written for this machine. If you cannot get them to waive connect time, it is much cheaper for you to buy a computer. To edit for a year of 40-hour weeks would cost you \$10,000. Ten years of such editing would cost \$100,000. For less you can have all contained under heading #2, plus several terminals.

I present #4 in dead seriousness. At the very least it will cause UMass to see how ridiculous the connect time charge is. But it would also give you complete independence from a self-serving computer center. DEC, under a maintenance contract, would keep your computer going, and with our software there should be no problems. DEC would certainly agree to software compatability as a condition of sale.

Professor Joseph Donohue - 3 September 4, 1974

I would very much like to have your point for point reactions to these ideas. I see no future in the course outlined at UMass last month. Joe, it pains me a great deal, but I cannot in conscience support their proposal, and if your projects adopts it I will have to resign from the advisory board.

Sincerely,

Ben R. Schneider, Director
The London Stage Project

BRS:rl

cc: Dean Stone

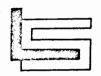
Vernon Steinberg

Reid Watts

Thomas Headrick v

Mike Hall

Enc:



THE LONDON STAGE 1800 - 1900

Ele hadon St

A Calendar Of Performances

24 September 1974

GENERAL EDITORS Joseph Donohue Dept. of English Univ. of Massachusetts Amherst, MA 01002 413-253-9802

James Ellis Dept. of English Mount Holyoke College South Hadley, MA 01075 413-586-2563

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Professor /Ben R Schneider Jr The London Stage Project Lawrence University Appleton Wisconsin

Dear Ben

I'm replying as soon as possible after receipt of your letter of 16 September, with a view to your impending conference with Vernon Sternberg and Winchester Stone. Jim and I have recently had some intensive sessions aimed at replying in detail to your earlier letter. But we have done so in the context of impending deadlines for submission of grant applications to ACLS, APS, Guggenheim, and Folger, with NEH in the offing. The letter that follows here, long as it is, should be regarded as no more than a draft of what will be at a later date a more considered response. Its purpose is merely to show you the current drift of our minds. Obviously, the decisions made at this juncture-once they are made--will affect everything after-We hope that, in sharing this response with wards. your colleagues, you'll regard it simply as another stage in a series of ongoing talks.

Let us take the points in your 4 September letter one by one, as you requested.

"outrageously expensive."

1.1 Keypunching. Keypunching has been adopted only by default. It is being used only initially, as a convenient means of entering data into the computer on a small scale. Without it we would not be able to have any data to look at. We don't view keypunch as the optimal method. Obviously it is a slow, painstaking, error-prone, and high-cost way of getting 1,000,000,000 characters into the computer. As you suggested, we suspect that optical scanning is the best way, since it is fast and, on a large volume basis, acceptable in cost, and since it also enables us to work with contributing editors who have nothing more than an IBM Selectric and an OCR-B ball. The hypothetical editor in Saskatoon who has such a typewriter is in business; he can even load it into

his car along with reams of paper, take off for the northern wilds, and, with power obtained from a gasoline generator, transcribe from microfilm reader to typewritten copy, renewing his energies for this slogging work with a little dry fly fishing on the side. The third alternative -- which we do not see as exclusive, but as additional -- is the CRT terminal. You have rightly emphasized its desirability as an editing device. Obviously it can also be used for input. But we naturally do not want to use it as primary or sole input device, for two reasons: (1) it would be outrageously expensive to buy enough terminals to do the job if they were farmed out to contributing editors and put on line (say, via telephone) to UMass; or outrageously slow with just one or two in use locally, by full-time hired help, because of the huge volume of information; (2) having the CRT locally as sole input device would throw a great deal of the cost on us, whereas if we put initial encoding (and editing too, where possible) in the hands of contributing editors and their local set-up, we save ourselves a lot of money and we give editors the chance to control their own work much more. we do indeed go the route of optical scanning, we would prepare tapes from typed transcriptions sent in by editors, then return the tapes to them for local editing.)

- 1.2 \$5.00/hour connect charge. Obviously, this is something that must be looked into and negotiated. On the other hand, if our understanding is correct, we will be able within a year to implement the on-line/off-line modal option required for using the Beehive or similar CRT. I presume that this would materially decrease the amount of connect time.
- 1.3 "\$100,000 system analysis and coding." We agree that this figure is very high, but we are not yet convinced it is unreasonable. It is our understanding that the figure includes coding—coding fifty times as many characters as encoded in the LSTB. It also includes, we are told, the cost of an optical scanning device, which we may be able to persuade the university to purchase, or help us purchase, and allow other projects to use. (The UMass Computer Center is now actively exploring this option.)

Obviously, part of this high cost is programming. We would like to save money here too, but it is not clear to us that we have any alternative except to go ahead and spend money on programming. Obviously, we would like to be able to take advantage of the programming that has been done for the LSIB, if this were both technically and administratively feasible. As mentioned in our August conference, however, we need to have full retrieval and editing capability locally in order to do our job as editors; this means we need full programming locally. We realize you disagree with this point of view, and we would like to ask you what actual arrangements you would propose whereby we could do our proper editing job if all our data were at Lawrence (as you suggest in your 16 September letter).

No

An additional problem arises. The new UMass computer, CDC Cyber 70 Model 74, is fast, executing three million instructions per second. Since it is available for our use, we are attracted by the possibilities and practical advantages of using it. If we do so, we believe

we must use the programming languages it is designed for -- Fortran, Cobol, etc .-- and consequently must find ways to adapt or make compatible programs in other languages. If such programs were available to us, we would then need to investigate the factors of cost and time involved in achieving this compatibility. The fact is, however, that we feel relatively uninformed on this issue of "compatibility" and are seeking further information.

"disastrously inefficient."

There is obviously a difference in point of view on the relative efficiency of SITAR versus the editing and retrieval programs envisioned by our Computer Center. Let me try to describe our understanding of their point of view. The terrifically high volume of data involved in LS 1800-1900 directly affects efficiency. What may be efficient for 21 million characters may not be efficient for one billion. To put this more precisely: our understanding is that you use a sequential search system. Even with your 21 million characters, considerable time is involved in accessing for certain jobs. (In your essay "Using SITAR," you describe yourself as sitting and reading a book or writing a letter while the machine grinds away; we would be happy to be persuaded otherwise, but we honestly don't understand how that can be considered efficient, while what we propose is "disastrously inefficient.") In the view of our computer people, sequential search is not efficient for our huge number of characters. Consequently, they want to implement what they call "index sequential and random access techniques," which, they claim, greatly reduce access time. Nevertheless, even if this is so, we remain unsure whether SITAR might not still be used or adapted for such a system. We think we need more information on this point, as on others, and are exploring it further.

From the standpoint of the system here is the number of compaction to lie with setting up our system here is the number of compaction to lie with setting up our system here is the number of compaction of Cyber computers in this country and abroad that might be used by our contributing editors as "local" input and editing systems. O. G. We brockett, our editor for 1800-1810, reports that his university, bas such a computer. Imperial College, University of Lon-Village model), and we see From the standpoint of efficiency, another great advantage that seems Cyber completed with contributing editor.

Brockett, our editor for low and the standard will be consulted in the same city where the majority of our data will be consulted. There are other Cyber computers at close to twenty institutions here and abroad. Understandably, our long-range consideration is that the overall system we adopt should be one that has the best chance of being widely and generally accessible. We are told that these chances are high with equipment that adheres, as Cyber 74 does, to current ANSI standards.

Still another advantage, according to our people, is the level of the complete with the series of th

3. "unable to deliver the goods."

We're confused by this allegation. Is there possibly an unacknowledged difference in vocabulary here? Do you not store your information as full playbills? Surely you don't mean that you have a completely separate set of data organized exclusively by actorrole? / You say, "Only a system which uses the performance of a role by an actor as the basic unit of data can give you what you want." Is this really your basic unit of data? What about the basic fact that a certain piece is performed by a certain theatre on a given night--i.e., your *p classification? And if you want the whole playbill, as you do when you are editing it, don't you call for it just the way we would? What happens in a given theatre on a given night is our concept of the basic unit of data; after all, we are compiling a calendar of performances. We have to ask, why is an actor-role the most desirable "basic unit" instead of, say, a unit compounded of play-author, or play-theatre, or play-genre, or scenery-scene designer, or even playbill-printer? It seems clear that all these units are desirable to have, depending on the researcher's needs; and since they are all contained within the full playbill entry, that playbill then would logically become what might be called the "master retrieval unit." The system of indexes that our computer people envision would enable us to go directly to these discrete units, just as you go directly to an actor-role unit. is, the proposal here is that the basic storage unit is the full playbill, but this is supported by a number of full indexes for the most important elements in that bill. Much sophisticated retrieval can be done swiftly by means of these indexes. Moreover, we intend to demand, in our specifications, the same kind of access to unstructured text that you have by means of SITAR. The access to misspellings, for example, that you discuss in "Using SITAR" would be a feature that we want too. Our understanding of the phrase "index sequential and random access techniques" is perhaps no more than rudimentary, but what we understand by this is, in effect, a capability to find information in the data bank with high efficiency. editors we dare not settle for anything less. We presume that this capability will be the result of the "complex interlacing of pointers" that you allege our system will not have. All we can say is, we know what results we want, and we will accept only a system that provides the capability to achieve them. We think that SITAR is an admirable system, partly because we have seen it in operation under your control. Whether we use SITAR or devise our own system to accomplish the same thing is a question we cannot answer right now, apparently, partly because of the complex proprietary interests involved and partly because it is unclear just what the compatibility of SITAR is with the UMass system. This last is a point that we are striving to clear up through consultation, and it has our top priority.

We agree with you that the scale and complexity of our enterprise make it necessary that we receive special concessions from UMass. We will shortly be engaging in high-level consultations toward this end. In any such consultation, one of our top priorities would obviously have to be the need to implement the most efficient editing and retrieval system. Your word for this is SITAR, and we agree that SITAR (or its compatible equivalent) is exactly or else very close to being what we want.

12/20 100

In urging us to implement SITAR, however, you add a crucial parenthetical point: "They should also be ready to implement the London Stage retrieval system (if it can be released to you)." The parenthetical condition is, of course, a crucial matter but one out of our control. Before we can go further, we would need to know whether the system can be released to us. But let us speculate on the assumption that it may. We would then be in a position to insist that this system become the basis for the editing and retrieval system implemented for LS 1800-1900 at UMass, unless we were absolutely convinced that it just would not work on Cyber 74. We think that our leverage here would be the fact that, whatever system is finally implemented, we want the same editing and retrieval capability that you now enjoy with SITAR; it's up to UMass to provide us with this. Possibly the best way, from the standpoint of cost and/or efficiency, is to use (or adapt) SITAR. We think that still remains to be seen, and, as we have said, this remains our top priority.

On the other hand, if SITAR were not to be made available to us, what choice do we have but to go the route that the UMass people have sketched out? We see the point of your suggestion number 4 (page 2, bottom) that we buy our own PDP11, since at least this suggestion illuminates the actual costliness of the \$5.00/hour connect charge. But what do we do with that PDP11 without the LSIB programs written for that machine? We reiterate once again our view that we won't be satisfied with capabilities inferior to those you have achieved or are achieving with SITAR. The only question is, how do we obtain at least that much capability?

If we read the implications of your four-point proposal (page 2) correctly, you mean that we must install ourselves and remain in the driver's seat throughout this long process. Let us assure you, we have already made it clear to our computer center that we will set all the specifications for our work, and they have agreed to work to our specifications. We think it would be intolerable as well as inappropriate to have terms dictated to us, which, we infer, you are suggesting is happening now. But it is also natural and inevitable (one may say without cynicism) that everyone involved in this project, or any project, has a special interest. We presume that the prestige of the institution is partly what is at stake for UMass; it would be very surprising if it were not. we have even more at stake, and we must try to do the fullest justice to the essential nature of the research project while at the same time balancing the special interests and claims of all parties involved.

This point leads, we believe, to the first of the alternatives you propose on page 2 of your letter. If we understand your proposal correctly, you are suggesting that a fresh entity be formed, still to be called the London Stage Information Bank: something separate and distinct from either of the two research projects but acting as the governing board of both projects. We think that this suggestion should be explored by all of us, together, in a meeting called as soon as mutually convenient. We would be happy

to host such a meeting here in Amherst, if you can find travel money--another large "If" these days!--or to go somewhere else (e.g. to New York at the December MLA meeting) to meet with you and any others interested in attending. We like your idea of having neutral persons on this proposed executive board, and we wonder if Joe Rabin would be a likely candidate (despite his present remove in California on sabbatical)?

In any case, it seems clear that we must do our utmost to resolve the problems that have arisen, to the satisfaction of all concerned. One of the largest of these problems seems to lie in the area of proprietary interests. We are beginning to explore this matter with our contributing editors and would certainly like to do so with your LSIB Advisory Board.

Another topic we need to consider is the future application of the computer systems for textual editing and retrieval now being implemented. We think it's inevitable that, before long, someone will come along who wants to do The New York Stage or The Philadelphia Stage or The Manchester Stage. Moreover, we ourselves, or others as mad as we are, might some day want to do The London Stage 1900-2000. It might not even be "some day," because the fact is that the LSIB idea is perfect to serve as a basis for a data bank for contemporary theatre history, beginning now. Why not find a way to make such data gathering techniques available to theatre collections and/or universities in or near current theatrical centers, and persuade curators (and administrators) that at least some of the time now spent in laborious newspaper clipping and card indexing ought to be spent entering data into an on-site terminal? Why not hold a conference with the American Theatre Library Association and attempt to persuade them of these things, perhaps also persuade them that cataloguing by computer is the only efficient way to "cross-index" all their multifarious holdings-and perhaps even suggest that every organizational aspect of maintaining a theatre collection should be arranged with a view toward the eventual entry of materials themselves, or fully accessible reference to their contents, into a computer data bank?

Pie in the sky? Right now it is, but don't we have an obligation to ourselves and future scholars to talk these things over, plan for the future, and implement as much as we can now? We are ready and willing, and we trust you and your colleagues are too. We look forward to your reply as the next stage of continuing discussion.

And we trust also that the length and (we hope) the substance of this letter are evidence of our firm intention, which we reiterate now, of working with you and your colleagues toward an amicable and mutually beneficial settlement of these crucial matters.

Yours sincerely

Joseph Donohue

DC1 3 1974

PRESIDENT

9 Washington Mews New York, N.Y. 10003 30 September 1974

President Thomas S. Smith Lawrence University Appleton Wisconsin 54911

Dear President Smith,

I have just returned from another very pleasant visit to Lawrence. I went to confer with Ben R. Schneider about the progress and problems of the London State Information Bank. The week end was successful, especially since I had the chance to renew acquaintance with Dean Headrick, to meet at Ben's house some of your agreeable faculty, and to give a talk to a pleasing group of students on Garrick's acting of Shakespeare in the 18th century.

Sorry I had no chance to call on you, but I write now about a thought which came up in our computer confer ence, namely that with Ben somewhat short-hander, what uses of the potential for training up scholars could be made of the remarkable materials and know-how that you people at Lawrence have now at hand.

Ben, it seems to us, has developed a fine instrument for applying the new technologies to organizing and rendering easily accessible huge masses of information in the humanities. Computers are here to stay. If young scholars interested in theatre history could be apprenticed to Ben for a term, new dimensions of their careers would open up both to their advantage and that of future scholarship. I have taken the liberty to write to some friends down at Madison to see whether some of their graduate students might commute, or come to Appleton to see what could be arranged, or perhaps whether Ben could be made an adjunct there to bring his know-how to the youngsters.

Thought you might be interested in the possibilities of spreading the training function of the Lawrence set—up to upcoming humanists.

All the best. The Appletonians were as gracious

as ever.

Sincerely yours,

Geo. Winchester Stone. Jr.

FET Wouches te Slaw

cc. Ben Schneider

Mr. Schneider

Mr. Headrick

November 13, 1974

London Stage

Dear Ben.

I discussed the three levels of your possible involvement with the UW-Medison graduate students with the President and others of "his staff."

General Comments

Some staff members expressed concern about the diversion of our effort to graduate students and hoped that in time the London Stage would attract substantial involvement for our own undergraduates. We do not want to begin, at the back door -- so to speak, a series of mini-graduate programs. We have had good luck with the involvement of our undergraduates in faculty-originated research, and we would not want to see our undergraduates squeezed out by inviting graduate students to campus. I suspect you have sympathy with this view. On the other hand, the London Stage is unique among Lawrence's assets. It provides the only computer data benk on theatre history in the United States, and on that basis, your involvement with a few graduate students over the next several years would seem a desirable way of capitalizing on your own investment and our special position. Thus it is okey for you as a small adjunct to the development of the London Stage, but not for others on our faculty.

Specifics

- (1) If graduate students come here and are enrolled for work under your direction, whether for Lawrence credit or UW-Madison credit, we would have to charge them our normal tuition rate, that is, \$360 (subject to revision upward each year) for each course credit (ex its credit-hour equivalent). Any computer workshops taken under this arrangement would be covered by the cost of tuition, but if the student is not registered for credit, each computer workshop would cost one-third the course tuition rate.
- (2) Any use of the IBM 360 for personal research purposes by a graduate student (that is, on work not under your direction as part of the London Stage project) we would have to charge the student the rate of \$40 per wall-clock hour. That is the rate we would have to pay the IPC for extra hours plus a reasonable amount for University overhead.
- (3) As I mentioned to you, we would be willing to countenance your being off campus for perhaps as much as one day a week to teach a graduate seminar or direct graduate dissertations. But if the demands went beyond that level, we would expect that you would accept a reduction of your teaching load and compensation here in return for the time to pursue that work.

I think that touches most of the bases. Please let me know if you need any clarification.

Yours.

AGREEMENT

Lawrence University and University of Wisconsin-Madison

Lawrence University permits Professor Ben Schneider of its English Department to invite graduate students from the Wisconsin Department of Theatre and Drama to work with him as research assistants in the London Stage Project which he directs. It is understood that William Elwood, Chairman of Graduate Studies in the aforesaid Wisconsin department, will oversee the work that these students do at Lawrence, and that he will visit Lawrence at least once each Wisconsin semester to evaluate their work. Professor Schneider may dismiss any such student at his own discretion if in his opinion the student is not suited to the work.

The University of Wisconsin will reimburse such research assistants for the work they do at Lawrence and pay any commuting and other expenses in accordance with Wisconsin's arrangement with the students.

In return for this assistance, Professor Schneider will teach these students how to use the London Stage system in performing the variety of tasks that arise during their stay at Lawrence. It is assumed that by this process they will learn how the London Stage system works and how it is designed. Toward this end, Professor Schneider will engage them in tasks of the degree of difficulty commensurate with their capacity at any given time.

Either the University of Wisconsin-Madison or the particular student shall be expected to reimburse Lawrence University for costs of computer time on the IBM 360/44 at the Institute of Paper Chemistry and computer disk space on the Lawrence PDP 11/45 to the extent that such computer use is for a student project which requires computer time and storage beyond the normal use by the London Stage Project. The costs of these services (which may be revised from time to time) shall be \$40 per wall-clock hour on the IBM 360/44 and \$1 per 256-word block per month of disk space on the PDP 11/45. Lawrence will offer office or desk space to the student in some appropriate location if it is available, but it cannot guarantee either.

Thomas E. Headrick Vice President for Academic Affairs Lawrence University AMERICAN SOCIETY for EIGHTEENTH-CENTURY STUDIES

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Lordon Hay

Department of English D1 University of Pennsylvania Philadelphia, Pa. 19174 Tel. (215) 594-7348

> Professor Ben Ross Schneider, Jr. The London Stage Project

Lawrence University

Appleton, Wisconsin 54911

Dear Professor Schneider:

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ASECS this.

The both problem of the search of the

I hope you will forgive my long delay in answering your letter of 19 February; the announcement about the NEH Research Tools program drew many responses, which I have been answering personally.

There is no question that the London Stage Project qualifies as a research tool, more especially since the NEH is already supporting it (your LSIB phase). From my discussions with the NEH project people, I gather that they would welcome your further applications, especially if they come to them with the support or encouragement of the ASECS Research Committee; indeed, they seem to have so many applications for Research Tools that they are eager to have some sense, from the learned societies in the field, of the usefulness and appeal of applications.

We are planning to meet at New Haven in July. Do you think that you could let me have eleven copies of your proposal (you might start with No. 2, but if you wish to include all three remaining portions mentioned in your letter, it might give us a more general overview) by the middle of May? Since you have made such proposals before. I won't go into detail about the form it should take; you will know all about this.

I note that David Mann has offered you the information base for his Congreve concordance. I ran into David at our Knoxville regional meeting last week; he told me that he and his wife are planning a research tools application, too.

With best wishes,

Sincerely yours,

Paul J. Korshin Executive Secretary Mr Hearhich

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Department of English D1 University of Pennsylvania Philadelphia, Pa. 19174 Tel. (215) 243-7348

27 October 1975

Professor Ben Ross Schneider, Jr. The London Stage Project Lawrence University Appleton, Wisconsin 54911

Dear Professor Schneider:

I am finally writing up the results of our Research Committee's discussions last July, and hope you will forgive me for taking so long to comment on the proposal you sent us (unfortunately, we were just swamped -- and we have rather limited secretarial help this year).

Your memorandum to me of 10 October, with your October 1975 Newsletter, proved helpful in answering some of the questions the Committee had about the proposal. We were unanimous in agreeing that the London Stage Information Bank was a qualified research tool. However, we had a number of questions about its likely audience and the usefulness to which it would be put. We thought that your application should speak more to such matters as (1) who would use the tool, and (2) how broad would its use be outside of theatre history. How much does a search cost? How long would it take? We wonder whether you could include more detail on these matters in your final application.

The research committee meets again on 12 December 1975. If you could let us have, by 24 November, a redrafted version of your May 1975 proposal, stressing the information I mention above (9 copies, please), we will discuss it when we gather and draft a letter of support for the NEH.

Once again, I regret the long delay in replying to your many nice letters, and hope that you will have time to prepare a final proposal by late next month.

As you may remember Disk space and another terminal were budgeted in this-

Sincerely yours,

Paul J. Korshin Executive Secretary PROPOSAL TO ADD
THREE BIBLIOGRAPHIES
TO
THE LONDON STAGE INFORMATION BANK

SUBMITTED BY

BEN ROSS SCHNEIDER, JR

PROFESSOR OF ENGLISH

LAWRENCE UNIVERSITY, APPLETON, WISCONSIN 549110

MAY 1975

BACKGROUND

THE LONDON Stage, 1660-1800, "A CALENDAR OF PLAYS, ENTERTAINMENT AND Afterpieces, Together with Casts, Box-Receipts, and Contemporaby Comment, COMPILED FROM THE PLAYBILLS, NEWSPAPERS AND THEATRICAL DIARIES OF THE PERIOD," EDITED BY WILLIAM VAN LENNEP, EMMETT L AVERY, ARTHUR H SCOUTEN, GEORGE Winchester Stone, Jr. and Charles Beecher Hogan, Southern Illinois University Press, 1960-1968--21,000 characters/ 8000 pages, 11 volumes--has now been CONVERTED TO A COMPUTER-ACCESSIBLE INFORMATION BANK AT LAWRENCE UNIVERSITY, THANKS TO GENEROUS SUPPORT FROM THE NATIONAL ENDOWMENT FOR THE HUMANITIES, THE Andrew Mellon Foundation, a friend of Lawrence, and other private bonors, to WHOM WE ARE MOST GRATEFUL. THIS ENTERPRISE IS NOW IN THE MOPPING-UP STAGE. Student editors, using an eight-page rule book are at present using trial INDEXES TO LOCATE TYPOGRAPHICAL ERRORS AND IRREGULAR SYNTAX IN THE COMPUTERIZED These corrections are made on the screen of a Cathode Ray Tube TERMINAL OF LAWRENCE'S COMPUTER. WHEN THIS WORK IS DONE (SEPTEMBER 1976, AT THE PRESENT RATE); THEATRE HISTORIANS WILL HAVE AN INDEX TO EVERY NAME AND TITLE IN THE WORK AND AN INFORMATION SERVICE AT LAWRENCE WHICH CAN PROVIDE VARIOUS TABULATIONS OF THE FACTS AS AN AID TO DIGESTING THIS GIGANTIC HOARD. There are approximately five names or titles per line of The London Stage. PROGRAMS DEVELOPED BY THE PROJECT BREAK DOWN PERFORMANCES INTO BASIC MOLÉCULES, A MOLECULES BEING THE PERFORMANCE OF SOMETHING BY SOMEONE ON A DATE AT A THESE MOLECULES CAN BE RETRIEVED AND SORTED AT THE ATOMIC LEVEL SO AS . TO PRODUCE THE REPERTOIRE OR STAGE CAREER OF AN ACTOR OR THE HISTORY OF A ROLE. ANOTHER PROGRAM, SITAR (System FOR Interactive Text-editing, Analysis, And Retrieval: see appendix 1) is a virtual concordance to the text.

Since more than 200 articles and Books a Year are written on the theatre OF THE RESTORATION AND EIGHTEENTH CENTURY, THE INFORMATION BANK'S USEFULNESS TO SCHOLARS WORKING ALONG TRADITIONAL LINES WILL BE CONSIDERABLE. BUT THE AVAILABILITY OF A MACHINE-READABLE LONDON STAGE: 1660-1800 CHANGES THE THEATRE HISTORIAN'S CONDITIONS OF EXISTENCE IN A FUNDAMENTAL WAY. IN A SORT OF JOHN HENRY CONTEST: DEAN GEORGE WINCHESTER STONE: JR RECENTLY COMPILED BY HAND A LIST OF DAVID GARRICK'S PERFORMANCES (SOME 2500) FOR HIS FORTHOOMING ACCOUNT OF GARRICK'S STAGE CAREER. THE LONDON STAGE PROJECT'S STEAM HAMMER PRODUCED THE same compilation 40 times faster, and sorted the results twice, once by date AND ONCE BY ROLE, TO TOP OFF ITS VICTORY. SINCE HE WAS NOT EXPECTING TO WIN, Dean Stone bid not break his Heart, but being a prime instigator of the project WAS DELIGHTED AT HOW BADLY HE LOST. ESSENTIALLY, THE THE COMPUTER ENABLES THE HISTORIAN TO GET OUT OF THE TREES AND LOOK AT THE FOREST. "If I AM A BETTER HISTORIAN THAN OTHER MEN," MICHELET ONCE SAID, "IT IS BECAUSE I HAVE A LARGER TABLE." A COMPUTER MEMORY IS A VASTLY LARGER TABLE THAN MICHELET COULD EVER HAVE HAD.

Some of the uses to which The London Stage Information Bank may be put can be surmised from a survey of the enguiries on hand to date: Identity of Mas

MIRTHWIT FOR AN EDITION OF MOLL FLANDERS; A QUOTATION FROM DRYDEN; MISSEHAVIOR OF TEMPLARS, FOR A SMOLLET EDITION; CASTS OF SHERIDAN'S PLAYS, D'KEEFE'S PLAYS; STAGING OF SHAKESPEARE'S PLAYS; EVERY ROLE NAME IN EVERY PLAY; BOX RECEIPTS; RELATIVE POPULARITY OF PLAYS; PREVALENCE OF ITALIAN ACTORS; FRENCH INFLUENCE; POLISH INFLUENCE; SPANISH INFLUENCE; TRENDS IN COMEDY, TRAGEDY AND PANTOMIME; ACTIVITIES OF CERTAIN SINGERS, DANCERS, AND LIBRETTISTS; SOCIAL HISTORY; SUCCESS OF SATIRICAL PLAYS; 18TH CENTURY VOCABULARY (FOR THE DED); ELIZA HEYWOOD'S STAGE CAREER; SALWAY'S STAGE CAREER; RICH'S OFFERINGS AS MANAGER; CAREERS OF ACTRESSES WHO APPEARED ON THE STAGE WITH GARRICK; MATERIALS FOR A CATALOGUE OF RESTORATION THEATRE MUSIC; THE TEN MOST POPULAR PLAYS IN THE LAST DECADE OF THE 18TH CENTURY; THE PLAYS ON THE LONDON STAGE IN 1776. ONE CAN ALREADY SEE HOW COMPUTER ACCESS TO THE FACTS CREATES AN EAGERNESS TO GET A BROADER VIEW.

The power we have to make very easily a very great number of agrangements of London Stage information will invite new kinds of research in theatre history. We will be searching for patterns in the data: in what ways is one season like another? In what ways different? What is a typical stage career like? To what extent do actors specialize? What is the effect of the repertory system on actors' careers, casting, play selection? Does casting indicate a class structure in companies? Is casting a clue to the 18th Century interpretation of plays? We will be looking for trends: the rise of pantomime, the increasing interest in Shakespeare, changes in the proportion of tragedy to comedy, the waning of Restoration comedy. The rise of sentimentalism. The decline of the drama.

ALTHOUGH THE LONDON STAGE IS A VAST HOARD OF INFORMATION, THERE ARE BESIDES TWO PUBLISHED BIBLIOGRAPHIES CONCERNING THE STAGE DURING THE PERIOD WHICH TOTAL 11,066 WELL-ANNOTATED ENTRIES, AND ONE UNFINISHED BIBLIOGRAPHY OF 18TH CENTURY PLAYS. THE PROJECT'S INFORMATIVE POWER AND USEFULNESS TO THE ACADEMIC COMMUNITY, IT IS APPARENT, WOULD INCREASE BY A FACTOR MANY TIMES GREATER THAN THE WORK INVOLVED, IF WE COULD ADD

- 1) English Theatrical Literature, 1559-1900, A Bibliography, Incorporating Robert Lowe's Bibliographical Account of English Theatrical Literature (1888), compiled by James Arnott and John W Robinson. London: The Society for Theatre Research 1970.
- 2) RESTORATION AND EIGHTEENTH CENTURY THEATRE RESEARCH: A BIBLIOGRAPHICAL GUIDE, 1900-1968, COMPILED BY CARL J STRATMAN, CSV, DAVID G SPENCER AND MARY ELIZABETH DEVINE. CARBONDALE, ILLINOIS: THE SOUTHERN ILLINOIS UNIVERSITY PRESS, 1971.
- 3) An Annotated Bibliography of Eighteenth Century Plays, begon by Father Carl Stratman, but interrupted by his tragic death in 1972.

PROFESSORS ROBINSON AND ARNOTT AND THE SOCIETY FOR THEATRE RESEARCH HAVE AUTHORIZED US TO PROCEED WITH ENGLISH THEATRICAL LITERATURE; THE CLERICS OF ST VIATOR AND THE SOUTHERN ILLINOIS UNIVERSITY PRESS HAVE AUTHORIZED US TO FINISH FATHER STRATMAN'S BIBLIOGRAPHY OF PLAYS AND INCLUDE THAT AND HIS BIBLIOGRAPHY OF THEATRE RESEARCH IN OUR INFORMATION BASE. WE HAD HOPED TO ENTER 1 AND 2 IN THE CALENDAR PROJECT (RO-6297-73-176) BUT UNEXPECTED PROBLEMS FORCED US TO GIVE

up that phase. (Discussed in My Letter to The Endowment dated 4 December 1974).

Making these works accessible to our indexing and retrieval system will greatly improve the usefulness of each, as a result of exhaustive mechanical cross-referencing. For example, each entry of Father Stratman's bibliographies is now listed under ONE of several hundred subject headings (not including proper names, of which there are several hundred more). Our system makes sure that each entry will be accessible from ALL headings to which it pertains. We can make this extravagant claim because SITAR, being a virtual concordance to every syllable, word or phrase on file, can find "headings" that are not even imaginable until enquired for by some scholar in want of peculiar information. Since the Arnott-Robinson and Stratman bibliographies are copiously annotated, they are very rich in potential cross-references. The composite information-pelivering power of the London Stage, 1660-1800 plus these bibliographies should be considerably greater than that of each by itself, because we could supply the enquirer not only with all London Stage references to a topic or person, but also with all the most likely sources of further information.

We plan to ADD this extra information using the same student help that has PROVED SO EFFECTIVE IN EDITING THE LONDON STAGE. STUDENT ASSISTANTS, AS MANY AS POSSIBLE ELIGIBLE FOR THE GOVERNMENT WORK-STUDY SUBSIDY! WILL ENTER AND EDIT THE BIBLIOGRAPHIES BY MEANS OF OUR SITAR SYSTEM. THE KIND OF CATHODE RAY TUBE TERMINAL WE ARE USING IS LIGHT YEARS AHEAD OF A TYPEWRITER. THE REASON IS THAT WHEN A MISTAKE OCCURS! A TYPIST CAN INSERT! DELETE! OR CHANGE TEXT INSTANTLY ON THE CRT SCREEN; WITHOUT ALTERING OR REFORMATTING ANY TEXT THAT IS ALREADY CORRECT. IN CONSEQUENCE, ANYONE WHO KNOWS WHAT PERFECT TYPING LOOKS LIKE CAN ACHIEVE IT. THE TERMINAL'S QUIET, COMFORTABLE ELECTRONIC KEYBOARD, MOREOVER, ENABLES A GOOD TYPIST TO TYPE FASTER AND BETTER THAN SHE CAN DO EVEN WITH AN PRELIMINARY TESTS SHOW THAT A GOOD STUDENT TYPIST CAN ELECTRIC TYPEWRITER. ACCURATELY ENTER: PROOFREAD: AND CORRECT TEXT OF THE ARNOTT-ROBINSON BIBLIOGRAPHY AT A RATE OF FOUR FAGES AN HOUR--50 CENTS A PAGE AT A SALARY OF TWO DOLLARS AN HOUR. BIBLIOGRAPHIES ONE AND TWO WILL BE ENTERED AND INDEXED IN THE SUMMER OF 1977 BY THIS PROVEN METHOD.

I propose that the unfinished bibliography be completed as a Ph.D. thesis BY A QUALIFIED GRADUATE STUDENT IN THEATRICAL OR LITERARY HISTORY AT AN American university. The opportunity can be announced in the project NEWSLETTER: NOW REACHING OVER 400 INTERESTED LITERARY AND THEATRICAL HISTORIANS. AS A PRELIMINARY STEP, THE STUDENT WOULD WORK ON THE PROJECT AT LAWRENCE, SOME TIME EARLY IN THE PROCESS OF COLLECTING MATERIAL FOR THE BIBLIOGRAPHY. WILLIAM ELWOOD, DIRECTOR OF STUDIES IN THE GRADUATE DRAMA Department at the University of Wisconsin, Madison, and I have beveloped a plan WHEREBY GRADUATE STUDENTS THERE MAY WORK HERE ON AN APPRENTICESHIP BASIS IN ORDER TO BECOME FAMILIAR WITH COMPUTER METHODS OF RESEARCH. OUR DRAFT AGREEMENT ARRANGES THAT WISCONSIN WILL SUPPLY GRADUATE ASSISTANTS TO THE LONDON Stage Project, "in Return for Which, Professor Schneider Will teach these STUDENTS HOW TO USE THE SYSTEM IN PERFORMING THE VARIETY OF TASKS THAT ARISE DURING THEIR STAY AT LAWRENCE. IT IS ASSUMED THAT BY THIS PROCESS THEY WILL LEARN HOW THE SYSTEM WORKS AND HOW IT IS DESIGNED. TOWARD THIS END, PROFESSOR Schneider will engage them in tasks of the degree of difficulty commensurate WITH THEIR CAPACITY AT ANY GIVEN TIME."

IF SUCH AN APPRENTICE WERE ALSO COMPLETING FATHER STRATMAN'S BIBLIOGRAPHY, THE EXISTENCE OF A CONCRETE GOAL WOULD MOTIVATE AND FOCUS THE EXPERIENCE. AT LAWRENCE HE WOULD BE ENGAGED IN TASKS DESIGNED TO INTRODUCE HIM TO COMPUTER METHODS OF ENTERING, DESIGNING AND SEARCHING BIBLIOGRAPHIC DATA BASES. UNDER THE GUIDANCE OF HIS OWN UNIVERSITY HE WOULD BE FINISHING FATHER STRATMAN'S BIBLIOGRAPHY. HIS PROJECT WOULD CONTRIBUTE TO OUR KNOWLEDGE OF COMPUTERIZED BIBLIOGRAPHIES, INCREASE THE COMPREHENSIVENESS OF THE LONDON STAGE INFORMATION BANK, ENSURE THE CONTINUITY OF KNOWLEDGE GAINED BY THE LONDON STAGE PROJECT, AND, NOT THE LEAST, PROVIDE THE SCHOLARLY COMMUNITY WITH AN IMPORTANT RESEARCH TOOL.

FATHER STRATMAN HAD JUST BEGUN COMPILING HIS BIBLIOGRAPHY. I GATHER THAT HE HAD COLLECTED A GOOD DEAL OF RAW MATERIAL. THE CLERICS OF ST VIATOR HAVE AGREED TO RELEASE THIS MATERIAL TO A QUALIFIED BIBLIOGRAPHER. FATHER STRATMAN HAD CHOSEN A SET OF CATEGORIES AND DESIGNED A FORM FOR ANNOTATION (APPENDIX 4) THAT WOULD ENSURE THE MAXIMUM AMOUNT OF INFORMATION WITH THE LEAST WASTE OF TIME AND SPACE (AND ADAPT WELL, INCIDENTALLY, TO COMPUTER PROCESSING).

Since the graduate school concerned would have ultimate responsibility for this bibilingraphy, I do not request funds for it here. But I would like approval of it in principle before seeking candidates for the job.

Вирсет

THE PROGRAMS WRITTEN TO PROCESS, EDIT AND SEARCH THE LONDON STAGE, 16601800 HAVE BEEN TESTED AND PROVED BY MORE THAN A YEAR'S CONTINUAL USE. No
FURTHER PROGRAMMING WILL BE NECESSARY TO ADJUST FOR PROCESSING BIBLIOGAPHICAL
ENTRIES INSTEAD OF CAST LISTS, BUT A LITTLE PROGRAMMING WOULD MAKE THEM
CONSIDERABLY EASIER TO USE. EDITING THE EIGHT-VOLUME LONDON STAGE WILL
CONTINUE AT LEAST UNTIL SEPTEMBER 1976, AND AFTER THAT ANSWERING QUERIES WILL
OCCUPY OUR PRESENT FACILITIES. SINCE WE WILL CHARGE OUR RETRIEVAL COSTS TO OUR
USERS, NO FURTHER COSTS WILL ENSUE FOR CALENDAR. BUT MAINTAINING THE
INFORMATION SERVICE WITH THE ADDED BURDEN OF ENTERING THE BIBLIOGRAPHIES AND
TRAINING ONE OR MORE GRADUATE APPRENTICES WILL REQUIRE ANOTHER CATHODE RAY TUBE
TERMINAL AND ANOTHER STORAGE DISK. WHEN THE BIBLIOGRAPHICAL WORK IS DONE, THE
EXTRA CAPACITY WILL BE USED FOR FACULTY RESEARCH AND TEACHING (SEE APPENDIX 2)
AND FOR MAINTAINING AN AUTOMATICALLY-INDEXED LAWRENCE COURSE CATALOGUE (SEE
APPENDIX 3).

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The state of the s	REQUEST	LU COST- SHARING	TOTAL
SALARIES , y			
Programmer2 months /	\$1600		\$1600
STUDENT EDITORS @ 50 CENTS/PAGE	, 700		700
1214 pages (2 bibliogs)			
DIRECTOR: ONE SUMMER	5000		5000
FRINGE BENEFITS, DIRECTOR	500	•	
SUPPLIES, POSTAGE		300.	
Environment Conf.			
DISK DETER AND DISK 10 500	HOD-FRAGE	720 + 200 ms	Alluca 5000
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WAGES AND SALARIES			
GRAND TOTALS	\$20550	\$ 6550	\$27100

MEMORANDUM

May 9, 1975

To: Mr. Schneider

From: Mr. Hall

Subject: Your proposal to NEH

Thank you very much for giving me the opportunity to review your proposal. The project sounds very interesting and challenging, and I think your approach is sound. I hope that you will find the following observations to be relevant and useful:

1. I seriously doubt that you will be able to get a qualified programmer who will be willing (and able) to do what you want within a sixty day period. Even the best programmer will need at least two weeks to get up on SITAR and your PL/1 software as they presently exist, and you should plan on his spending at least two weeks just documenting the work he will have done for you. This gives him just four weeks to actually do the work.

I am also concerned about your having such a person for a period of just sixty days, since it seems to me likely that you will need programming assistance from time to time over the entire period of the project (which I take to be one year). Although I am of course willing that Center staff do all we can to meet your needs, I also know that there is no good substitute for your having "your own man".

Thus I urge you to request funds for a full man-year of programmer assistance. In my opinion, the benefits to your collegues and co-researchers will amply justify that cost.

2. The current price of an RKO5 drive is:

1	RKO5AA 1.2 million word moving head drive\$5,	100
1	Installation of above	260
1	Field trip to install above	75
1	Estimated shipping on above	5 0
		198
	(I urge you to have two packs, in case one goes	
	bad)	
	Total initial cost\$5,	683

Maintenance, 40 hours per week, 52 weeks, @\$20/wk...\$ 800

Total maintenance/year \$1,120

3. I agree that you can get a terminal which will do the job for you (either another Beehive, or perhaps an ADM or OMRON) for \$3,000 including shipping and installation. But I urge you to add on the following:

a.	Maintenance for 1 year @ \$15 per month\$	275
ъ.	Cost of a shielded cable, Y-64 to MH 427	150
c.	Cost of a 60 lpm, upper/lower case impact	
	printer unit, slave to the scope (including	
	shipping and installation)	,000
d.		600
•	Paper for c above	200

Item a. will be a necessary expense, of course. Item b. will provide protection for your data during transmission - and the same cable should also serve the present Beehive, lessening the line noise you indicated you have been encountering. Items c. thru e. will, in my view, vastly aid in your project's work, for you will be able to print out high-quality copy whenever you need to. Several 60 lpm printers are now available in the \$3 to \$4 thousand dollar price range, and have established good track records. I should think that you could make a strong case to NEH for this item of equipment.

A point on your disk needs: As I understand it, the character density of The London Stage is about 2,500 characters per page (21,000,000 characters divided by 8,000 pages) (by the way, don't you mean 21,000,000, and not 21,000, on Line 6 of your Background section?). I thus guess that the 1,200 pages you will enter in this project will mean about 3,000,000 characters. As we both know, one may put about 2,000,000 characters on an RK05 pack - but that will leave no room for work-space for editing; a working load of about one million characters per drive is what I understand you have found to be reasonable, leaving about half of the pack free for work space. On this basis, if you needed to have the entire 3 million characters up at once, a total of three drives, rather than the one you propose, would be required. Of course I do not know that you will need (or want) to have all 3 million characters up at once, and I do not presume to have an informed opinion on whether or not your research will require that you do. But I suggest that you consider asking for more than one drive, and/or that you ask for funds to "buy" disk space, such funds to be applied by Lawrence toward the cost of an RP04 40-million word drive and controller.

In this connection, I would be derelict if I did not advise you that an addition of a fourth RKO5 to the present system would result directly in a reduction of up to 5% in the response-time speed of the system to requests for disk I/O from users of our two present "public" RKO5's. This is because your second drive would place an additional drain on the attention of the controller, but would not provide any opportunity for the system to compensate by allocating "public" files to your drive.

I hope that you have found this information useful. If I can be of any assistance to you in your proposal effort, please let me know.

cc: Mr. Headrick Mr. Chernoff

Mr. Schneider

Mr. Wrolstad May 12, 1975

Grant for Addition of Three Bibliographies to the London Stage Bank

Dear Ben,

I am sorry that it has taken me longer than it should have to respond to your request (but for the record, I just got it on May 8). Tom headrick did call me about it and had some good comments to make about certain parts of your budget. For example, he questioned whether the rate for the student editors was high enough, and he suspected the fringe benefit allocation was too high. I would agree that the fringe benefits are too high, since Social Security would presumably have all been taken care of in your base salary and all other programs would be similarly accommodated, other than if you're expecting additional contributions to the TIAA/CREF program, and that would not reach \$500. You should note that the \$500 does not show in your total column, although the subtotals cross foot okay.

The substance of my response is that you should not expect Lawrence to contribute to your continuing London Stage Program beyond computer time. Consequently, the supplies, duplicating, and telephone costs will have to be funded some other way. Tom Headrick did indicate that he felt the maintenance on the terminal could be accommodated within the Computer Center budget, but you'll have to confirm that with him.

Marwin O. Wrolstad

/ cc: Mr. Headrick

Lawrence University

MEMORANDUM

Schneiderfile

To

Mr. Headrick: Copies to M. Hall, President Smith, Mr. Wrolstad

From

B. R. Schneider

Date June 20, 1975

Subject

Computer time

After being told that it is doubtful that present commitments will allow for as much 360 processing as <u>The London Stage</u> needs this summer, I have reached the following decision; either Lawrence gives the project the support it needs or I recommend that it be discontinued. I am tired of fighting every inch of the way, and I'm not going to do it any longer. If our facilities and staff are insufficient for the job, it is time to recognize the fact.

For example:

- 1) Program listings asked for in February have still not been produced.
- 2) A program alteration (remove a card or two and recompile) asked for a few months ago has not been made.
- 3) A time-consuming OS system error arising in February has not been diagnosed.
- 4) Both my 360 and PDP11 disks have been occupied without my knowledge, the first case requiring a half-hour of 360 time to diagnose and repair and the second costing me a weekend of file rearrangement in order to load an editing file.
- 5) Promises of 28 hours/month processing could not be kept, requiring me personally to spend two weekends on the 360.

In short, nothing gets done unless I personally nag, finagle, and maneuver, day in and day out. This is not the way to get the job done and I have better things to do. Any further requests for reasonable service will go to you, not Mike Hall, and If our facilities cannot support the project, then we must face the fact and stop trying.

les Set up meeting weed of Oct 13, by his was - include

MEMORANDUM

TO: MR HALL, MR <u>Headric</u>k, MR WROLSTAD, DEAN STONE 28 SEPT 75 FROM: Ben Schneider SUBJECT: LSIB use of computing facilities in the foreseeable future.

WHEN WILL WE FINISH EDITING?

ABOUT A YEAR FROM NOW WE WILL BE READY TO EXTRACT THE FINAL INDEX FOR THE SOUTHERN ILLINOIS UNIVERSITY PRESS. THEN EDITORS OF THE SOURCE WILL PROOF THEIR PART OF THE INDEX, MAKING NUMEROUS CONSOLIDATIONS AND DIVISIONS OF ENTRIES BY IDENTIFYING WHICH ENTRIES CONTAIN TWO ACTORS WITH THE SAME NAME AND WHICH HAVE TWO NAMES FOR THE SAME PERSON. THEY WILL WRITE IDENTIFYING TAGS. WHEN THEIR WORK IS DONE WE WILL EDIT THE INDEXES AND RE-SORT THEM FOR THE LAST TIME. THIS PROCESS SHOULD KEEP US BUSY FOR ANOTHER YEAR. WE HAVE NOW ARRIVED AT SEPTEMBER 1977.

HOW MUCH WILL THIS EDITING COST?

THE PROJECT CONSUMED 3360 EDITOR-HOURS LAST YEAR. WITHOUT WORK/STUDY SUBSIDY, DUR COST PER YEAR AT THIS RATE IS ABOUT \$7000. TWO MORE YEARS AT THIS RATE WOULD BE \$14,000. ONE HOPES THAT THE REDUCTION OF THINGS TO CORRECT IN PASS 3 WILL REDUCE REQUIREMENTS CONSIDERABLY AND THAT CONSOLIDATING AND SEPARATING ENTRIES WILL NOT CONSUME EDITHOURS AT THE SAME RATE. LET'S HOPE WE CAN GET DONE FOR \$10,000.

WHERE IS THE MONEY COMING FROM?

If we do \$100 dollars retrieval business/month, that will bring in \$2400 dollars in the next two years. I would imagine that in two years we will be doing more than \$100/month. Next September, with a "pure" information base, we should ask \$200/month for the same number of queries. As I have said, the annual bibliographies show about 100 articles and books per year that could have or should have used our service. This figure does not include scholars outside theatre-history who would need our help in tracing leads to 18th century figures. 100 queries/year at \$50/query would be \$5,000 dollars, and at this rate we would make it. At double our current charge/search (which I would say was reasonable) we would make \$10,000/year, and have no problem paying editors. This September's Newsletter puts us in the market. I should know by the first of the year how pealistic these guesses are.

When the Newsletter goes to a foundation, it will be accompanied by a feeler about the feasibility of applying for editing funds. But I don't think that a computer project that ran short on it's first estimate is going to attract much pity, given the current attitude toward computer projects in the corridors of power.

HOW MUCH 360 TIME WILL BE NEEDED TO FINISH THE INDEX?

Completion of index and information base requires three editing passes through the information base and two sort/merges of the index. Processing of all 29 batches is complete for pass two. 20 batches remain to be processed for pass 3. At 7 hours/batch we require 140 hours of 360 time to supply editors with trial indexes. Then it will take 29 \times 7 --203 hours—to make the final base and extract 29 final

INDEXES TO THESE BATCHES. THESE MUST BE MERGED, EDITED AND SORTED AND MERGED AGAIN (THE BASE WILL NOT NEED FURTHER ATTENTION). IT CURRENTLY TAKES 1/2 HOUR TO SORT ONE BATCH OF OUR DATA; THERE ARE 29 BATCHES—ABOUT 15 HOURS TO SORT THE WHOLE. SUPPOSE MERGING THE 29 BATCHES TAKES ANOTHER FIFTEEN HOURS. THEN OUR 360 TIME CONSUMPTION LOOKS LIKE THIS:

PROCESSING FOR 3RD PASS 140 HOURS
MAKING FINAL BASE & INDEX 203 HOURS
MERGING THICE, SORTING ONCE 45 HOURS
TOTAL 388 HOURS

This figure assumes 100% efficency; better make it 425. Odd jobs not included.

How much 360 time will query-answering require?

When we arrive at the "pure" information base (Sept 1976) we will make inverted files on actor, role, and theatre, to cut down search time for these items. Until then we will make sequential searches through the information base at a rate of about one hour/four-year span. Garrick's career (see Newsletter) of 32 years would take 8 hours to extract, and about one hour to sort and print. Query-answering should average about 10 hours per month, then, if we do \$100 of business/month.

Inverted files will be made by sorting and merging the records extracted for the final index. Since sorting and merging takes 1 hour per batch, three inverted files will require a total of 90 hours.

How Long Will I KEEP THE TERMINAL AND DISK?

By September 1977, editing of The London Stage will be minimal, but never finished (I fear). Information retrieval of unindexed kinds of things (topics) will be required. I would like to write at least two books before I retire (I can write twice as fast on the Bee). The terminal is involved in the project in many ways besides editing LS (we edit programs, JCL, editing rules, our directory to files, 360 and SITAR documentation, and as right how, I save typing trouble and delay by writing difficult communications on it). In other words it increases my efficiency a whole lot. For better or worse I am now locked in to SITAR. So I hope I can have priority on the terminal until I retire.

Since a text-processing terminal is pretty helpless without a place to put text, I think the disk should stay dedicated to the terminal. Perhaps another sitar terminal on the disk would make sense. You would virtually ligidate sitar by taking away its disk. I propose that I be given supervision of the disk and one terminal. When our editing effort is finished, there should be room for several other projects as well as The London Stage and me.

I could stop editing and see what punds accumulate (we are now about \$2000 in the red, I pind), but I hat to lay off such good editors! Den

November 7, 1975

Ben R. Schneider, Jr.
Director, The London Stage
Information Bank
Lawrence University
Appleton, Wisconsin 54911

Dear Ben:

I'm impressed by your industry and your excellent, concise presentation of why you need a \$10,000 grant for <u>The London Stage</u> project. You are so well along on a humanistic project that it seems to me that you are definitely a National Endowment for the Humanities project. We can't trot out for NSF delectation the fact that you're doing something innovative in compiling this index, I Bontt believe. If I'm wrong, correct me. Have you tried the American Council of Learned Socities?

It would be nice if you could get a little more than the \$10,000 to set up a small endowment to keep the project running. Will you be making any money on the fees you are charging? Thotice that you have still a third of the total to be indexed.

Let me know if I should jog NEH for you. It sound so if they would have a pretty good baggain of they made this grant.

It was good to hear from you.

Sincerety,

Ida Wallace] Director

IW:jb

12-10-7

December 8, 1975

Ben Ross Schneider, Jr. Professor of English Lawrence University Appleton, Wisconsin 45911

Dear Ben:

How can I tell you anything about how to get a grant? I suspect givers are gratified to read the English language in a proposal. It's a pleasure to read your writing. I don't know anyone else who gets \$10,000 for a mere inquiry and I don't know anyone else who has the same luck sliding around to the back door of the National Endowment for the Humanities by getting the American Society for Eighteenth Century Studies to list that project as a top priority. Anyway, I'm awfully glad things are easier now because I remember when you were really sweating out the support problems.

Don't forget to enclose the wonderful article in the New York Times of December 3 which describes the seventeenth century lost play discovered by way of the London Stage Index. I was awfully excited to read it.

Let's do clank tem cups at Cloucester Crescent in three more years -- if not before.

With warm regards,

Ida Wallace Director

IW:tm

Enclosure: "Restoration Comedy Lost Since 1669 is Discovered"
New York Times, December 3, 1975

Dictated by Mrs. Wallace and signed in her absence to avoid delay.

APPLETON, WISCONSIN

December 2, 1975

Hr. Hark S. Auburn Department of English Ohio State University Columbus, Ohio 43210 Mrs. Muriel Priedman 4380 Marine Drive Chicago, Illinois 60613

Professor Alan Woods
Theatre Research Institute
309 Thompson Library
1555 Weil Avenue
Ohio State University
Columbus, Ohio 43210

Dear Co-proposers,

The enclosed proposal went to Paul Korshin, Exec Secretary of The American Society for Eighteenth Century Studies, on the 26th of Movember.

Lawrence agrees to this proposal on the condition that users of the LSIB system will release Lawrence from responsibility for user's mistakes, unavailability or incapacity of N. R. Schneider, expenses of learning to use the system, lost time due to computer or terminal failure and other accidents. That I, NRS, will do my best to see that these accidents don't happen is understood; but it is impossible to guarantee perfect operation. If all goes well with ASECS and NRS, you will be asked to sign agreements to this effect before we go to work.

Yours hepefully,

3. R. Schneider Director

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ec: Tem Headrick

Mn Headrick

Final Report on Phase Two

of

The London Stage Project (RO-6297-73-176)

at

Lawrence University

Appleton, Wisconsin 54911

Grant period: 1 August 1972 to 31 August 1975 (Requested extension to 15 October 1975)

Endowment and Andrew Mellon Foundation: \$84,997 Lawrence University 17,984 TOTAL 102,981

> Submitted by Ben Ross Schneider, Jr Project Director

In phase one of The London Stage Project our goals were to develop computer programs for data entry and retrieval and to find out the best way of entering into the computer The London Stage, 1660-1800, "A Calendar of Plays, Entertainments & Afterpieces Together with Casts, Box-Recepts, and Contemporary Comment, Compiled from the Playbills, Newspapers and Theatrical Diaries of the Period," by William van Lennep, Emmett L. Avery, Arthur H. Scouten, George Winchester Stone, Jr, and Charles Beecher Hogan, Southern Illinois Press, 1960-1968: 11 volumes, 8,000 pages. But we actually went one step beyond our goals for phase one, by managing to enter the whole 8,000 pages of the London Stage, thanks to the Endowment's willingness to match a larger sum than anticipated. Full details of phase one are contained in the book I wrote about it called Travels in Computerland, Addison/Wesley, 1974, 3 copies of which are being sent under separate cover to Dr Reagor in accord with the Endowment's rule about publications resulting from a The goals of phase two were 1) to develop an efficient facility for editing computerized text, 2) to proofread and standardize this text, 3) to create an index to every name and title to be published as a companion to the original volumes, and 4) to add to our data base two bibliographies pertaining to the same material. I will report on these activities one at a time:

Editing Facility

The editing facility was designed to meet the following specifications: it must be easy for non-technical editors to use; employ a Cathode kay Tube (CRT) terminal with built-in insert, delete and write-over capacity; interact with Lawrence's PDP/11 computer; and produce files compatible with phase one's retrieval and indexing system for the IbN 360 computer that Lawrence shares with a neighboring institution. To build the editing system, we secured the services of Reid Watts, a graduate in math, physics, and computer science of Kansas University, who was also very sensitive to humanistic pursuits (and the problems of human beings with computers). In a little more than a year he produced a self-contained system with 15 basic programs that will do almost anything with text that a humanist might want to do, which the user speaks to in English imperative sentences and which answers him in English. It became known as SITAR, by which we meant (System for Interactive Text-editing, Analysis and Retrieval). Central to SIPAR is the notion of quoting the string of text you want to work with on the CRT screen, with the important retinement that ellipses may be used for any part of the string. In practise the beginning and end of the segment of text, or the beginning, middle and end are sspecified. display the previous sentence in this report, I would command 'SHOW IN PhS2 ". ... practise BACK', in which "PHS2" is my abbreviation for this file, the beginning string is the period and two spaces in front of the sentence, the middle is the word "practise" (but could be any other word in the sentence), and the end is the period closing the sentence (SITAR conveniently assumes that the first 3 dots are the ellipses and the last is a period). This statement observes the conventions for quoting English text. "BACK" tells the computer to search backwards for a passage satisfying the "pattern" quoted; otherwise it would assume a forward intention. Of course any sentence

containing the word "practise" will satisfy the quotation. If we had commanded "FIND" instead of "SHOW", SITAR would have made a list of all sentences in the file that satisfied the pattern and kept a count of the "hits". Most computer editing systems key on a line number or a block number, requiring that lines or blocks in the text must be previously numbered. We wanted a system that would key on anything in any conceivable computer file. Besides editing and finding text, SITAR can copy a file, chop off either end of it, load files onto the computer from tapes, put them back, replace all examples of any string in a file with any other string, create new files from the terminal as I am creating this one, make up pages for printing and print them, as this will be printed. A detailed description of SITAR, describing some or its technical features and elaborating its capacity for text manipulation and analysis (p7, "Evaluation") is attached (Appendix A). This account has been accepted for publication by the journal Communications of the Association for Computing Machinery (actually more concerned with programming than with machines).

Editing

Seventeen student assistants (four or five at a time) have used SITAR to edit the computer version of The London Stage. When we are finished we will have passed through the whole text three times. In the first pass, designed to eliminate transcription errors, the editor works with a printout of the transcribed text and error messages generated by three IBM 360 programs implemented in phuse one. The SCAN program, which eliminates parenthetical commentary except for delimited names and titles, locates delimiting errors. STRUCTURE, which analyzes the syntax of entries and categorizes items, locates impossible dates ("33 Arg 1976"). LADDLR fills in casts referred to but not listed or not listed completely in the original, because they are the same or nearly the same as previous casts ("Love for Love. As 22 Sept., but Valentine-Wilks"); it locates mismatches in dates, theatres, titles, roles, and actors, and other hard-to-find errors.

In the second pass recognine, editors use a new set of error messages generated by these programs plus a trial index to all names and titles. The indexes show up unique items that are either obviously erroneous or probably erroneous, and must be checked against the original. Pass one is now complete and half of pass two is done. The third editing pass will repeat the process of pass two.

Editing was a much bigger job than anticipated; it may take us a year more to finish. Fortunately The Andrew Mellon Foundation has granted us another z10,000 with which to complete the task. The lag-in editing is inherent, I believe, in the fact that the original text was written and published without computer processing in mind. If a printing process that used magnetic tape for running the presses, as is often the case, had been used, we would have avoided transcription errors. If the original editors had adhered to the same standards for writing entries, there wouldn't be so many syntactical irregularities to iron out. For example, to take a minor case, parts 1-4 put a colon after the time when a dance or song takes place; part 5 puts nothing. Our programs can deal with the most frequent irregularities, but it would be next to impossible to deal with all or even many of them, simply because the dirficulty of writing successful programs increases exponentially with every exception one adds to the specifications. order to find time notations in part 5, a program would have to search each dance and song section for all possible time notations, using a predetermined list of all possible notations, and NEVER confuse them with performers or titles. In the earlier parts, the colon is an

absolute identifier. One must settle for programs that handle the average case and edit the irregularities out. The best way to grasp the problem is to peruse our editing rules (attached, Appendix B). There were a great many more irregularities than we thought.

In October, when grant funds ran out and we had completed nearly half of pass two, we were in a position to offer useful material to scholars. From the first, we had announced our intention to charge a fee, and now it seemed advisable to seek income for the editing account. So, in Newsletter No. 6 (in appendix C, Newsletters) which went to 800 scholars in literature, theatre, and drama, we set up a fee structure and invited orders. In four months only one enquiry has arrived, despite the fact that we had already received correspondence from 17 scholars interested in eventually using our information service. Bither our rates seem too high, or scholars are waiting for us to finish editing, or humanists are simply slow to perceive the opportunities offered by mechanical information retrieval. I haven't picked up any hints as to the reason.

Index

phase one left us with programs that located every indexable item by date and theatre. In phase two programs were written to consolidate date/theatres for all repeated items under one heading and make index pages for publication by photocopying (sample page, appendix D). The Southern Illinois Press may still choose to set the index in type either automatically from a tape image of the computer index or manually, using our printout as a typescript. Progress toward this goal is entirely dependent on progress in editing. Before publication each of the living editors (Scouten, Stone, and Hogan) will proofread indexes to each of the five parts of LS. Their corrections will be transferred to the computer version by editing with SITAR. Then we will make a merged index to all five parts as a whole. By then we will be nearing the end of 1977.

Bibliographies

Unexpected editing problems forced us to give up the proposed additions to our data base, and transfer the budgeted sum to the editing account (Requested in my letter to Dr Reagor of 21 October 1974). The prospects for entering these now seem fairly good. During the grant period I lectured at annual conventions of The American Society for Theatre Aesearch and the Modern Language association, and at the drama departments of The University of Wisconsin, and Chio State. Out of these associations have come plans to apprentice graduate assistants at Ohio State and Wisconsin to me for instruction in computer processing. If these plans are carried out, the Arnott/Robinson/Lowe bibliography of English Theatrical Literature and the Stratman Bibliography of 48th Century Theatre Research, proposed for phase two, may be computerized by apprentices, as well as some other ancillary works. Furthermore, Professor Mark Auburn (Snylish/Onio State) is eager to complete Father Stratman's unfinished bibliography of 18th Century Plays, and Professor Alan Woods (Pheatre/Ohio State) is seriously contemplating a Calendar of Performances on the Provincial American Stages, 1770-1910. to use the London Stage computing system because it promises sayings in complying, editing, printing, and indexing. Since they will compile with the computer in mind, they need not undergo the costly experience or dealing with variant syntax.

Unfortunately Lawrence's computer cannot now handle the extra load these projects would entail. This fact prompted me to write a proposal (originally encouraged by the American Society for 18th Century Studies; appendix D) for extra hardware, in which I assumed that beyond this capital expansion, each project would seek funds separately, including charges for use of the Lawrence computing services. It includes a fee schedule illustrated by the Auburn project. I have since discovered that such a proposal runs counter to the Endowment's policy of preferring new projects. Leeds Barrol has suggested that I could merge the capital costs with the service costs to these external projects, and I have written to him for further advice. Certainly it makes better sense to fund each project on its own merits, rather than to capitalize Lawrence independently on the supposition that projects will materialize to take advantage of the equipment.

The London Stage Project and The National Interest

My best effort on these lines is the "Overview" of Travels in Computerland, which deals generally with the uses and abuses of computers, using the London Stage experience for illustration. specifically, I believe that computer methods can produce cheaper, more accurate, more comprehensive, more accessible information sources than have ever been produced by conventional methods, and do the job faster. At the same time, ignorant application of computers in humanistic projects is wasting great sums of money and time. In the hope that at least a few humanists could learn from my experiences, I wrote Travels in Computerland. But I get very little response from humanists. Systems analysts at IBM and CDC and computer scientists at this or that university are continually dropping me a line to say that they enjoyed Scientific American (October 1975) said that the book should the book. be deposited in cornerstones of computing companies so that future generations would know what America was like in the early 70's. A man in Australia wrote an approving review, which he hoped to get published in Datamation (a business computer magazine). The computer science department at Sutjer's, having picked up the book, has invited me to lecture on Feb 12. When I asked them why, they said that "they needed to get the user's point of view." That getting to know the "user" is the industry's greatest problem, I know. That they seem to want to do something about it, I am very happy. If my book can help, I am happier Moreover, in the trend is actual, numanists may begin to get better advice from their computing services, and thus avoid continual disaster.

Research frankt frankt

LANGENCE UNIVERSITY APPLETONY WISC 54911

DEAR LEEDS,

THANK YOU VERY MUCH FOR DISCUSSING LONDON STAGE PROBLEMS WITH DR Reagon. Perhaps the Best thing for Me To DO NOW IS TO REVIEW MY UNDERSTANDING OF THE ASECS-NEH PRELIMINARY REVIEW OF MY PROPOSAL TO TOOL UP LSIB TO PRODUCE OTHER RESEARCH TOOLS, AND COMMUNICATE MY REASONS FOR THINKING THE REVIEW WENT WIDE OF THE MARK. AT MLA PAUL Korshin relayed to me the following objections to my proposal (ENCLOSED): 1) (THE MOST SERIOUS) LSIB HAS ALREADY BEEN THE RECIPIENT TO TWO GRANTS FROM NEH. 2) THE PURPOSE OF THE REQUEST APPEARS TO BE THE ENLARGEMENT OF LSIB AND INCOME FOR LAWRENCE. 3) LSIB INFORMATION RETRIEVAL SYSTEM IS OBSOLETE, RESULTING IN A HIGHER COST PER QUERY THAN SOME MORE MODERN SYSTEMS WOULD ENTAIL.

- Both previous grants were matching grants. The policy of CUTTING OFF PREVIOUS GRANTEES WOULD SEEM TO MAKE LESS SENSE IN THIS CASE BECAUSE THE PRIMARY GOAL OF THE PROPOSALSIS CHEAPER RESEARCH TOOLS: AN INDEX TO GENEST'S ACCOUNT OF THE ENGLISH STAGE, A Bibliography of 18th Century Plays, and a Calendar of Performances on THE AMERICAN PROVINCIAL STAGES, 1776-1910. THE INVESTIGATORS WISH TO USE COMPUTERS ANYHOW, AND THIS SOLUTION PREVENTS DUPLICATION OF EFFORT.
- GRANTED THAT ENLARGEMENT OF LSIB AND INCOME FOR LAWRENCE ARE AN INEVITABLE BY-PRODUCT OF THE PROPOSAL, THE COST OF THE RESEARCH TOOLS IS STILL DRASTICALLY REDUCED, MAINLY BY THE USE OF AUTOMATIC PHOTOCOMPOSITION INSTEAD OF CONVENTIONAL TYPESETTING (SEE ACCOMPANYING PACKARD ARTICLE). I THINK THE PROPOSAL SHOULD STAND OR FALL ON THIS CLAIM. IT IS ALSO A FACT THAT LAWRENCE HAS BEEN VERY GENEROUS TO THE PROJECT, GIVING US PERHAPS TEN TIMES MORE COMPUTER TIME THAN THE COST-SHARING BUDGET CALLED FOR: AND ALLOWING US TO TRANSFER UNUSED COST-SHARING FUNDS FOR EQUIPMENT TO THE EDITING BUDGET. ADDED TO THAT, THE PROJECT HAS BEEN A HEAVY LOAD FOR LAWRENCE COMPUTING SERVICES, AND IT CANNOT BE INCREASED UNLESS THERE IS SOME COMPENSATION.
- OUR SYSTEM CANNOT BECOME OBSOLETE FROM ADVANCES IN HARDWARE, BECAUSE OUR PROGRAMS ARE WRITTEN IN BASIC AND PL/1, ASSIDUOUSLY supported by Digital Equipment Corporation and IBM, the two Leading COMPUTER MANUFACTURERS: THERE IS NO CHANCE THAT EITHER WILL BUILD COMPUTERS THAT ARE INCOMPATIBLE WITH THESE PROGRAMMING LANGUAGES) OR THAT LAWRENCE WOULD BE SO FOOLHARDY AS TO BUY CO'PUTERS INCOMPATIBLE WITH TEN YEARS PROGRAMMING WORK. IF THE OBJECTION IS THAT OUR INFORMATION SYSTEM IS NOT CONSTRUCTED ACCORDING TO THE MOST ADVANCED PRINCIPLES OF DATA BASE MANAGEMENT (DBM), THERE IS A REASON FOR THAT, TOO. RECENTLY REID WATTS, PROGRAMMER-ANALYST FOR PHASE 2 OF LSIB, MADE A STUDY OF THE FEASIBILITY OF USING A COMMERCIAL DBM SYSTEM FOR LSIB, AS PART OF THE REQUIREMENTS FOR AN ADVANCED DEGREE IN COMPUTER SCIENCE AT KANSAS UNIVERSITY. HE CONCLUDED THAT BECAUSE OF NECESSARY REDUNDANCIES IN OUR DATA BASE, WE WERE BETTER OFF WITH OUR CURRENT

SYSTEM. A DBM SYSTEM WOULD COST TOO MUCH TO MOUNT, USE, AND MAINTAIN. THE 22-PAGE REPORT IS AVAILABLE ON REQUEST. SITAR, OUR INTERACTIVE TEXT-HANDLING SYSTEM, IT WOULD APPEAR, IS DEFINITELY NOT OBSOLETE. COMMUNICATIONS OF THE ASSOCIATION FOR COMPUTER MACHINERY (THE LEADING PROFESSIONAL JOURNAL) HAS ACCEPTED OUR DESCRIPTION OF IT FOR PUBLICATION.

Where DO We GO FROM HERE? This proposal assumes that at least four proposals will be made to NEH, one by me for necessary hardware, and three from independent scholars seeking to use the facility thus expanded. You have suggested that I am not in this case a true principal investigator, and that the individual projects should pay for the hardware and software at Lawrence. If they do, I see two ways of proceeding: either these projects apply jointly, including my hardware/software budget, or each applies separately, each including the total hardware/software budget, with the stipulation that if any of the other projects are funded, they will share the cost of the Lawrence facility in proportion to the load they will put on it. Which is best?

Status of other projects: Muriel Friedman, Genest Index--proposal COMPLETE (EXCEPT FOR LAWRENCE HARDWARE/SOFTWARE PROBLEM), SUBMITTED TO ASECS, READY TO SUBMIT TO NEH. MARK AUBURN, BIBLIOGRAPHY OF 18TH C PLAYS: SOUTHERN ILLINOIS PRESS HAS GIVEN HIM FATHER STRATMAN'S COMPLETED HANDLIST, CLERICS OF ST VIATOR WILL RELEASE FR STRATMAN'S COPIOUS FILE OF XEROXED TITLE PAGES TO HIM AS SOON AS THE PROVINCIAL OF THE ORDER GIVES PERMISSION FOR HIM TO COMPLETE FR STRATMAN'S WORK. MY FRIEND IN THE ORDER SEES NO POSSIBLE REASON FOR WITHHOLDING THIS PERMISSION, GIVEN MARK'S EXCELLENT QUALIFICATIONS AND THE URDER'S DESIRE TO SEE FR STRATMAN'S WORK PUBLISHED. 3) ALAN WOODS, CALENDAR OF PERFORMANCES ON THE AMERICAN PROVINCIAL STAGES--APPROACHED ME SEVERAL TIMES ABOUT THIS BEFORE I EVER THOUGHT OF USING THIS FACILITY FOR OTHER RESEARCH TOOLS. ASKED TO BE COUNTED IN ON THE PROPOSAL. SURE OF HIS PRESENT PROGRESS TOWARD A CONCRETE INDIVIDUAL PROPOSAL. Other Prospects: John Robinson, Index to Bibliography of English THEATRICAL LITERATURE TO 1900; WANTS TO PROCEED, ALSO WANTS TO REVISE THE PUBLISHED WORK. ARTHUR SCOUTEN AND ROBERT HUME ARE PLANNING A REVISION OR SUPPLEMENT TO PARTS ONE AND TWO OF THE LONDON STAGE--LSIB CAN SAVE THEM LOTS OF TIME AND MONEY, BUT I HAVE NO COMMITMENT FROM

What method of funding these proposals shall we pursue? Your FURTHER ADVICE WILL BE VERY MUCH APPRECIATED.

Yours Sincerely,

BEN Ross Schneider, Jr

Mr Headrick

LONDON STAGE PROJECT LAWRENCE UNIVERSITY APPLETON, WISC 54911 26 FERRUARY 1976

DEAR MURIEL AND MARKS

Consultations with the Vice President for Academic Affairs and the Director of Computer Services here have led to the following solution of Lawrence's capital expansion problem. If charges to you and Mark Auburn equal our capital expansion costs, they won't ask any more. I therefore submit a revised price list designed to produce the needed funds at the amount of use you and Mark plan to make of our system: if one project doesn't get funded, we will have to turn down the other. We will also have to have a contract with the administering institutions (Kennedy-King and Ohio State) guaranteeing the amount budgeted for Lawrence computer services, in the event that either principal investigator does not complete the work. (We will have bought the hardware on the trust of Great Expectations.) Terminal services are calculated from Lawrence's published rates (Computing at Lawrence, 1974); other computing services are calculated from the rates published in LSIB Newsletter No 6):

SORT ENTRIES ALPHABETICALLY PRINT PROOF COPY MAKE INDEX	\$.01/ENTRY .005/LINE .02/ITEM
EDIT TEXT WITH SITAR TERMINAL	
RENT TERMINAL	125.00/MNTH
DISK SPACE	1.00/MONTH/BLOCK
TERMINAL ACCESS TO COMPUTER	4.00/HOUR
USE OF CENTRAL PROCESSOR	25.00/новя
RENT CRT TERMINAL	125.00/month
Make INDEX FOR PHOTOCOMPOSITION	.03/ITEM

Muriel Friedman, Index to Genest's Account of the English Stage, 400,000 index entries:

Make PROOF INDEX	\$8,000
Make Final INDEX	8,000
EDIT ON LAWRENCE SYSTEM, ONE MONTH	
4,000 BLOCKS DISK SPACE	4,000
160 HOURS COMPUTER ACCESS	640
16 HOURS CENTRAL PROCESSOR	400
1 MONTH RENT CRT TERMINAL	125
Total FOR FRIEDMAN	21165

Mark Auburn, Bibliography of 18th Century Plays, 4,000 bibliographical entries, 40,000 lines of text, 132,000 index entries:

SORT BIBLIOG ENTRIES	\$40
PRINT PROOF OF TEXT	200
SORT, ABSTRACT, PRINT PROOF INDEX	2640
Edit on Lawrence system, 3 months	
4,000 BLOCKS DISK SPACE	12000
480 HOURS COMPUTER ACCESS	1920
48 HOURS CENTRAL PROCESSOR	1200
3 MONTHS TERMINAL MENT	375
CONVERT TEXT FOR PHOTOCOMPOSITION	400
PRODUCE AND CONVERT FINAL INDEXES	3960
TOTAL FOR HUBURN	22375
GRAND TOTAL	(43540)

THESE RATES, I AM ASSURED BY DUP DIPECTOR OF COMPUTER SERVICES, ARE COMPETIVE WITH THOSE OFFERED BY OTHER UNIVERSITIES AND BY COMMERCIAL HOUSES. HOWEVER, RATES FOR DISK SPACE WILL BE MUCH REDUCED IF EITHER OR BOTH OF TWO THINGS HAPPEN: 1) ANOTHER PROJECT USES THE SYSTEM AND SHARES THE COST FOR HARDWARE EXPANSION THAT SUCH PROJECTS ENTAIL; 2) LAWRENCE RECEIVES FUNDS FOR THE NECESSARY HARDWARE FROM ANOTHER GRANT APPLICATION RECENTLY SUBMITTED. NEH WILL BE NOTIFIED OF CHANGES IN DUR RATE STRUCTURE, IF AND WHEN EITHER OF THESE EVENTUALITIES OCCURS.

I have heard guotations of anything from \$20 to \$50 per page for SETTING TYPE BY HAND FOR MULTI-FONT, HIGHLY-FORMATTED WORKS. I HAVE ALSO HEARD QUOTATIONS FROM 80 CENTS TO \$3.50 FOR SETTING A PAGE BY AUTOMATIC PHOTOCOMPSING FROM COMPUTER TAPE. AT \$30/PAGE, IT MIGHT COST \$30,000 to set Mark's BIBLIDGRAPHY AND INDEX BY HAND, AND PERHAPS ANDTHER \$20,000 FOR MURIEL'S INDEX. THE SAVING IN PUBLISHING COSTS, THEM, EASILY CANCELS OUT THE EXTRA COST OF PRODUCING THESE RESEARCH TOOLS BY COMPUTER. THE SAVING IN ERRORS AND SCHOLARS' TIME IS ALSO SIGNIFICANT, AND THE INDEXES WILL BE MUCH MORE EXHAUSTIVE THAN THOSE USUALLY PRODUCED WITHOUT MACHINE ASSISTANCE. ANOTHER SAVING IS THAT NEITHER RESOURCE WILL HAVE TO BE RETYPED INTO A COMPUTER (AS THE LONDON Stage HAD to Be) to get access to it BY A MECHANICAL SYSTEM OF INFORMATION RETRIEVAL. ALL THESE SAVINGS ARE POSSIBLE ONLY IF THE THE COMPUTER SYSTEM IN QUESTION ALREADY EXISTS. THEY WOULD BE QUICKLY EXCEEDED IF ANOTHER TEXT-PROCESSING AND INDEXING SYSTEM OF THE REQUIRED SOPHISTICATION HAD TO BE DESIGNED AND IMPLEMENTED FOR THE JOB.

LAWRENCE UNIVERSITY APPLETON, WISCONSIN COPY

Tom: this cuts our charges to him in half. It assumes will buy the course will buy the course with decide. DA 7

The English decide. DA 7

The English decide.

Mr. Mark Auburn Department of English Ohio State University Columbus, Ohio 43210

Dear Mark,

Muriel) just wrote to say that Kernedy-King University won't back her for reasons too difficult to unravel here. That leaves you pretty much out in the cold, unless #2 event on page 2 of my February 26 letter occurs: Lawrence receives funds for the necessary hardware from another source, We will not know if our other application (to NSF) will be successful until early in June. Since this occurs after The Endownent's May 3 deadline, you might submit a proposal that is contingent on Lawrence being funded. # Otherwise, wait and see. Since the cost for disk space would be most affected by this funding, I would recommend that we reduce this to 10 cents/ month/block. This would reduce our charges to you to about \$10,000. Terminal rent and the terminal access fee might as well stay as they are, because we would have to buy another terminal, and this would just cover it. The rest of the charges will have to stay as they are because they are based on those officially announced in our Newsletter. This adjustment is contingent on the Dean's approval, which I will relay to you as soon as I have it.

I'll be in Columbus for Alan Woods' shindig May 1. Hope I see you then. I also hope NSF will be kind. Those who should know are optimistic.

Yours sincerely,

Ben R. Schneider, Jr. Director.

BRS: Pl DK, Conditional in the compatible expense of buck inter CAKSE

MEMORANDUM

July 22, 1976

To: Mr. Schneider

From: Mr. Hall

Subject: Your memo to Mr. Headrick of May 17, 1976 in re shielded cable to Main Hall

This is written in response to your memo to Tom Headrick, a copy of which Tom sent on to me with instructions to go ahead and put in cable for eight terminals, to be paid for initially by London Stage, with non-London Stage portion to be reimbursed from Computer Center budget in Fall, 1976.

This is to confirm that you and I have discussed this matter further, and you have explored with technical experts the gain to your Project which would be achieved by installing such cable. You have been advised, and have advised me, that the gain to your Project would in fact be minimal (and possibly zero) in terms of the problems identified in your memo to Tom. Thus it is your present view that the cost of such cable for your project would not be justified, at least at this time.

Since the cable would be intended primarily to meet your needs, I have decided, as you know, that we will not proceed with its installation at this time. Thus no costs will be incurred by either your Project or the Center for this purpose for the indefinite future.

If I have misunderstood any aspect of this matter, or if you have any questions with regard to it, please let me know.

cc: Mr. Headrick V

Whal

LAWRENCE UNIVERSITY

MEMORANDUM

TO:

The Faculty

FROM:

Rik Warch

DATE: April 13, 1978

SUBJECT: Some Recent Triumphs

Bear Colleagues,

I write to share with you some news regarding yourselves:

- (1) Rachel France and Bruce Brackenridge have each been selected to participate in a National Endowment for the Humanities Summer Seminar. Rachel will be attending the seminar "Stability and Change: The Enlightenment in 18th Century Western Europe" conducted by Otla E. Fellows, Avalon Foundation Professor Emeritus of Humanities at Columbia University. Bruce will be attending "The Medieval World View" seminar conducted by Edward Grant, Professor of History and History of Science at Indiana University.
- (2) George Saunders has been selected by the ACM as the Fesident Director of the Florence Program for the 1979-80 academic year.
- (3) Bob Rosenberg has been accepted for a two-week summer institute at the Oak Ridge Associated Universities on "Energy Options for the Future."
- (4) Fred Gaines' collaborative piace "A Circle is the Sun" is being hailed in Minneapolic as "the finest original work to come out of the Children's Theatre Company in many years."
- (5) As many of you already know, Hen Schneider finished the London Stage
 Project on April 3, thereby missing his self-imposed deadline for
 submitting materials to the publisher by a scant twenty-four hours.
 Congratulations to Ben on the completion of that herculean assignment.
 He and his terminal are now taking on the Lawrence Course Catalog.
- (b) Emily Wixon recently won "Best in Show-Fiber" at a paper-Fiber exhibition sponsored by the Iowa City-Johnson County Arts Council. The show included work done in a variety of mediums and was judged by Gerald Nordland, Director of the Milwaukee Art Center.

Do let me know if there is any other news of this sort that I may share with the community.



Mr. Schneider

Mr. Povolny

March 13, 1980

The London Stage Information Bank

Dear Ben,

Many thanks for sharing with me your draft of the surrender of the London Stage Information Bank. In principle, I am sorry that you do not feel that Lawrence can hold onto that tremendous piece of work, but in practice I have to sympathize with you and our computer dilemma. The president wants to talk a little bit more about it and I am certain that he will be in touch with you.

Cordially,

The London Stage Information Bank
Lawrence University
Appleton, Wisconsin 54911
February 1980

Name Address Address

Dear Prospect,

I am writing to you as an information retrieval specialist theatre historian in hopes that you can help me to find a new home for The London Stage Information Bank.

For several reasons continuing maintenance of this information service at Lawrence University has become impractical. I will be teaching in London during the academic year 1980-81; I will be on sabbatical one term of each year, starting this spring; I will retire in five years. Finally, Lawrence University intends to stop buying time on the IBM 360 at a sister institution on which our retrieval system is mounted. All Lawrence's data processing will be transferred to its own PDP11, and PL1, the language in which LSIB's retrieval software is written, will be poorly supported here.

To qualify as a new home for LSIB, an institution would have to provide the following kinds of support:

- 1) A faculty member dedicated to and recognized as director of the information service. His duties would consist of learning the potential uses of the data base, maintaining communication between LSIB and the scholarly community, assisting potential users to find the best match between their research needs and the capacities of the information system, correspondence with potential users, managing finances, planning and supervising enhancements. This person should probably be an 18th-century theatre historian, preferably one whose own work involves him as a user, and one who either is familiar with computer methods or wants to become familiar with them.
- 2) Computing support in the form of analysts and programmers who are acquainted with information retrieval, and sufficient computer time for the needs of LSIB. It would be a big plus if the institution were actively engaged in humanistic computer projects and contained a group of experienced computing humanists.

The information base consists of a machine-readable facsimile of $\frac{\text{London}}{\text{London}}$ Stage, $\frac{1660-1800}{\text{London}}$, 11 volumes, 8026 pages--a daily calendar of who played what in what theatre, with commentary--and programs to pre-process and retrieve this information by actor, role, theatre, date, title, and most imaginable combinations of these.

The programs for pre-processing the base and extracting items from it are written in PL1. Another package for editing the text and locating any word, phrase, or word root in the facsimile version is written in BASIC-

plus for use on a PDP11 computer. Since the PDP11 processes the text in EBCDIC, transfer from one system to the other is no problem.

Any institution which houses LSIB will have to observe several constraints in the use of it:

- 1) The Southern Illinois University Press owns the copyright of the facsimile version of the text used as the base for LSIB. Although SIU has granted us the right to provide answers to the queries of individual scholars, no extraction of text or data may be published without the consent of the Southern Illinois University Press. And of course, any such publication will give credit to the source by means of a full bibliographical citation. SIU press has expressed interest in publishing computer output microfiche editions of all role histories and actor repertoires in the source.
- 2) The National Endowment for the Humanities, who largely funded the project require that LSIB be administered according to the terms of their grants to us, principally that information from LSIB be distributed to the scholarly community at cost. According to NEH rules, they may also require a grantee to deliver to NEH at the cost of reproduction the code and documentation of any computer programs developed under their funding (LSIB's programs were), and this right extends to any government agency.
- 3) Lawrence University expects to be reimbursed for the cost of maintaining LSIB since the expiration of funding, and given credit as the original sponsor of The London Stage project in any publications of or about LSIB. Lawrence will also reserve the right to sell or otherwise make available London Stage software to any persons, institutions, or businesses who may desire to buy it. The institution that takes over LSIB receives one copy of the software, which it may not reproduce without permission of Lawrence University.

LSIB is a rich mine of information, not only for theatre historians but also for historians, social historians, economic historians, musicologists, and folklorists. If there is a possibility that your institution might be interested in giving a home to LSIB, please let me know. I will be happy to supply further details.

Yours sincerely,

Ben Ross Schneider, Jr Department of English Director

Copies to: Mar Wrolstad, Rik Warch, Lee Ester, Mojmir Povolny, Davol Meader, Fred Gaines, Jim Evans; Mr Walter Kent, Acting Director, Southern Illinois University Press, PO Box 3697, Carbondale, Illinois 62901; Dean George Winchester Stone, Jr, 7205 Radnor Road, Bethesda, Maryland 20034; Mr George Farr, Division of Research Grants, National Endowment for the Humanities, Washington, D C 20506; Mr Gerald Tyson, same address

MEMORANDUM

TO: Lee Ester DATE: 10 Mar 1980

FROM: Ben Schneider

SUBJECT: London Stage Index makes Outstanding Academic Books list

Perhaps there is material here for one item in a story for the alumni magazine on Main Hall's achievements in research, to go with recent news of our research in science. The Preface to the <u>Index to The London Stage</u>. 1660-1800 shows how many alums were involved in the project, both as editors and computer consultants. And of course, many of our humanists have been honored recently by prestigious publication, awards, exhibits, reviews, etc.

I called Lawrence Woods at <u>Choice</u> to find out the mechanics of selecting titles for their Outstanding Academic Books list. He told me that the six subject editors choose 600 books from the 6500 annually reviewed by <u>Choice</u>. 200 publishers are represented in the field of 6500. Judgments are based on the <u>Choice</u> reviews with some corroboration from reviews in other places. Harriet Tippet tells me that the list has a substantial effect on library acquisitions.

The <u>Choice</u> review of the <u>Index</u> (enclosed), seems to indicate pretty well why it was chosen. The reviewer's main point seems to be that it makes a very rich source easily accessible for the first time. I find it significant that he thinks it "demonstrates in vivid detail the great value of computerization in organizing and printing such a mammoth reference tool." <u>Choice</u> reviewers don't often consider acquisition "obligatory" for college libraries.

Enclosures: Review, Choice selection notice

Copies to: Mojmir Povolny, G Winchester Stone, Jr, Charles Beecher Hogan, Arthur Scouten, Cathy Steiner, Ruth Steiner, Marc Weinberger, Cathy Boggs, Joe Jacobs, Mike Hall





100 Riverview Center, Middletown, Connecticut 06457 Tel. (203) 347-6933

PUBL I SHER	: Southern	Illinois	Univ.	Press	

Outstanding Academic Books 1979

BOYLE: JAMES JOYCE'S PAULINE VISION.

\$9.95

SCHNEIDER; INDEX TO THE LONDON STAGE

50.00

Choice Sept 79 SCHNEIDER, Ben Ross. Index to *The London stage*, 1660—1800, ed. by William Van Lennep and others. Southern Illinois, 1979. 939p 79-102595. 50.00 ISBN 0-8093-0907-6

The monumental 11-volume history and reference work The London stage. 1660-1800 (1960-68) represents the most important collaborative scholarship on the 18th-century English theater yet undertaken, with the possible exception of the same publisher's ongoing project, P.H. Highfill's A biographical dictionary of actors, actresses, musicians, dancers, managers, and other stage personnel in London, 1660-1800 (CHOICE, Apr. 1974), which was consulted for additional data in the seven-year preparation of this index. The London stage, 35 years in the making, was compiled by five eminent scholars, who, thanks to their calendar of performances, make available to students and scholars information never before retrievable in one place or in published form. (They have also inspired numerous similar projects for other centuries in England and for the U.S.) Although each volume contains a limited index, the entire work has not been easily accessible until now. This exhaustive index provides a ready guide to the information in the volumes in countless ways. The magnitude of this undertaking is enormous (25,000 entries that contain over 500,000 references to the 8,026 pages of the series) and the results are spectacular, as was the project on which the index is based. Schneider's effort demonstrates in vivid detail the great value of computerization in organizing and printing such a mammoth reference tool. The introduction is a bonus-an intriguing outline of the index's progress, use, the entering of the text, and the designing of the retrieval programs (expanded upon in Schneider's Travels in computerland, 1974). Both The London stage and its new index should be considered obligatory volumes for all good college library collections.

Yes. We are interested in participating in the 1979 OAB display in New York at the ALA annual meeting, and will be sending review copies to the CHOICE booth as per instructions.

No. We are not interested in participating in the 1979 OAB display.

Contact person at your company: Mr. James Simmons

Title: Assistant Director

Address: SIU Press - P.O. Box 3697

Carbondale, IL 62901

Phone: 618/453-2281

Mr. Ester

Mr. Povolny

March 17, 1980

London Stage Index

Dear Lee,

I wish wholeheartedly to support Mr. Schneider's suggestion that the special honor which was bestowed on his London Stage Index when it made the Outstanding Academic Books list should receive as much publicity as possible. I think that a story in the Alumni Magazine would be splendid and it could be enlarged by references to other work in our humanities division.

Yours,

cc: Mr. Schneider