Efrem

RESOLUTION TO AMMEND THE BYLAWS OF THE COMMUNITY MEMORY PROJECT

SUBMITTED TO THE MEMBERSHIP DECEMBER 13, 1983

If approved, this resolution would ammend Section 3 of Article II of the bylaws of the Community Memory Project, and add an additional article as follows:

ARTICLE II Membership
Section 3 Election of Members.

Current Language:
"It is the policy of the corporation that, whenever possible, employees and volunteers shall be members of the corporation. Any person who has worked for the Community Memory Project as an employee or volunteer for a period of six months shall be eligible to become a member. New members shall be elected by a majority vote of the members."

Proposed new language:
"It is the policy of the corporation that, whenever possible, employees and volunteers shall be members of the corporation. Any person who has been an Associate Member of the Community Memory Project for a period of six months shall be eligible to become a member. New members shall be elected by a majority vote of the members."

ARTICLE VIII
Associate Membership

Section 1: ASSOCIATE MEMBERSHIP. Associate membership in the Community Memory Project is open to all persons without regard to sex, age, economic class, race, physical handicap, or to political, social, religious, or sexual preference.

Section 2: OBLIGATIONS OF ASSOCIATE MEMBERS. Associate members of the corporation must actively work to develop the Community Memory system and otherwise to further the goals of the corporation as set forth in the Articles of Incorporation.

Section 3: ELECTION OF ASSOCIATE MEMBERS. New Associate Members shall be elected at Community Memory Project membership meetings by a two-thirds vote of the membership and associate membership in attendance.

Section 4: TERMINATION OF MEMBERSHIP. Any Associate Member may resign by notifying the Secretary of the Corporation in writing.

Section 5: VOTING. Each Associate Member shall be entitled to one vote on resolutions proposing the election of new Associate Members. Associate Members are not entitled to vote on other corporate matters.

Section 6: RIGHTS OF ASSOCIATE MEMBERS. Associate Members shall receive notice of, and shall be entitled to attend, all annual, regular, and special Membership meetings of the corporation. Associate Members may participate fully in discussion at these meetings unless a majority of the Members present at a meeting votes to limit participation to Members only.

Section 7: LIABILITIES OF ASSOCIATE MEMBERS. No person who now is, or who later becomes, an Associate Member of this corporation shall be personally liable to its creditors for any indebtedness or liability.

Notes on overloaded systems and distributed data bases.

The original CM systems should probably be brought up using an 8 to 10 MHz 68,000 system, with a fast 40+Megabyte disk and a Unix operating system. Such a system would cost about $20,000 and run 8 to 12 terminals, with reasonable performance.

When that system is overloaded there are four alternatives

① get a faster computer

② get a faster operating system

③ speed up the database system

④ Use multiple CPU's and ~~distributed database~~. non-distributed data base.

The alternative of a distributed data base has a number of problems that will ~~make this the~~ have to be solved before it can be employed. This will probably take several years.

First I'll detail the immediate alternatives, then I'll out line the problems with a distributed system.

1 Get a faster computer -

a large Perkin-Elmer 3260 for example
and/or faster disk drives
and/or a very fast swapping disk
and/or multiple disk drives (if the operating system is smart enough to do multiple seeks)
and/or multiple disk controllers (again if o.s. supports them)
and/or dma serial ports
more memory to cut down swapping

2 Get a faster operating system -

Unix has very slow disk handling, terminal handling, scheduling and the overhead for program swapping is very high. A system running only CM code needs very minimal system services. The file scheme in Unix probably does twice as many i/o transfers as actually required (this can be reduced with a very large buffer memory).
RT-11 and RSX-11M are examples of fast low-overhead systems if they are properly configured. Provos with the new scheduler should give very good performance. With the code kept in core, an efficient semi-contiguous file scheme, and an efficient terminal handler Provos should out perform Unix by two or three unless it is blocked by physical disk performance. To support support regular Provos needs a terminal handler and a disk handler. A disk handler will take from 1 to 3 months depending on how fancy

one wants to get. A terminal handler is a 2 to 4 month project depending on how general it should be. Both projects have had the initial work done at least once.

It is also possible to buy hardware with faster operating systems than Unix, such as Thoth on the Spectrix (68,000) or someone elses real-time operating system.

3 Speed up the Database system.

Sequitor itself could have its speed doubled with some smarter coding. CM uses so little of Sequitor that the amount of gain possible is not predictable but I'm sure there will be alot of room for improvement.

4 Multiple CPU's.

This is the most difficult step, but one supported by ~~er~~ Provos. The CM application can easily be broken up into 3 isolated components.

A. Running the terminals, editing and parsing commands.

B. User control, command analysis and processing.

C. Running the Disk, including searching and sorting.

The goals of all the above alternatives are to-

1) Get cpu processing fast enough so that the disk is kept busy continuously.

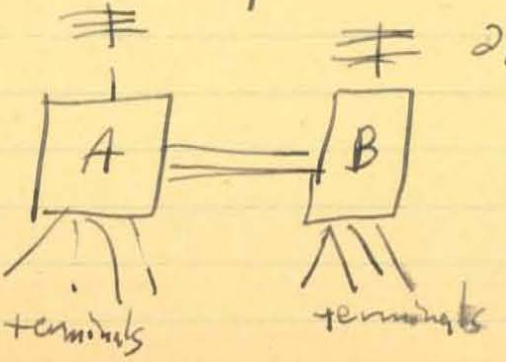
2) Get the best disk performance possible, fast disks, multiple drives + controllers.

3) Minimize the amount of disk I/O actually done.

Using all the above alternative and spending enough money makes it possible to build a system running hundreds of terminals. (That means big CPU's!)

Community Memory is supposed to be built out of modest parts and grow to an unlimited size. It is to be a distributed database. Here are some of the problems and limitations.

Say we need a bigger system so we got two systems and split the data base.



If the database is simply distributed at random between A and B then every time a search in initiated on A a parallel search must be done on B and the results compared. The result of the extra interaction is that the combination A+B is likely to be than ~~a multiple either A or~~ Than a single system (Assuming a multicpu system of the type described in ④ above).

On the other hand if every request can be analyzed as being suitable for either system A or system B then the work could actually be split. There is still the communications and coordination overhead, so that the throughput of A+B is not twice that of A but a reasonable amount of extra work can get done. Actually partitioning a data base in a query sensitive way is not a simple problem, There is no single concept or keyword that can be used to divid. the world. If nodes are geographically separate then the user can specify explicitly that a non-local ~~search~~ search is to be performed. This will not serve for expanding a node.

Another approach is to ~~keep~~ keep an item on the ~~node~~ system upon which it was entered but to index the item in all systems belonging to ~~the~~ the native sense of local. Then there are two kinds of cross-machine traffic: updating indicies whenever a new item is entered (a rare event) and getting items from [illegible]

common event, but a low traffic, slow-speed one). The major implementation problem in this scheme is maintaining consistency, especially after some system has a catastrophy and must reorganize it's data bossing some.

November 17, 1982

I was more than a little surprised at the recent papers by Efrem & Jude, because they propose a radical "solution" (dividing the organization) to a problem which, as far as I can tell, doesn't exist. None of the design meetings I have attended regarding CM have focused on anything other than a public system. There has been no talk of mailing lists, private terminals, or private data. The only variants from an "ideologically pure" CM have been the introduction of world trees as an option, and some discussion of how we would provide dial-in access if we later decided to do so.

The picture of "thing X" set forth by Efrem characterizes the focus of the group's efforts very well. Thing X is not being abandoned or forced to take a back seat. In fact, more concrete progress has been made towards realizing thing X in the last two months than in all the rest of the time I've been here. If this is happening despite the pressure of another Comdex rush, I can only project that even more rapid progress will be made starting next month, if we don't divert our efforts by a major reorganization.

I resent, as I always have, Efrem's implication that nothing worthwhile can happen without him. I don't wish to minimize Efrem's contributions to the project, and in fact a lot of his ideas are reflected in the work we have done recently. But the fact that the project is no longer under his direct control does not make it second rate. On the contrary, I think it has been an altogether healthy and productive change.

We have finally begun the work of making CM happen. I oppose dividing or diverting that effort.

—Carl

In answer to the spiteful part of carls note -

While I would hope that Community Memory will have things to crow about that don't have my finger prints all over them, credibility should demand holding the cackling off till thats true.

Most of the visible ~~sign~~ signs of change =

A separate CM meeting.
Peter and Michael working on a front-end.
An immediate effort to bring up a pilot.
Separate funding for CM.
Some one to take care of the most necessary work of the CM and VD corporations before leaving

are all things I initiated ~~with~~ with at best the passive ~~ac~~ assent of the group.

Lee

ANYONE WHO BELIEVES COMMUNITY MEMORY IS A RATIONAL

undertaking must be crazy. The amount of energy, time and money that has been poured into this flimsy construct should make clear its surreal nature. It is not a constructivist attempt to organize, make our side powerful, right any wrongs, or aid the accomplishment of any given task. Rather it is a call to spontaneity; mostly to individual spontaneity which we know will respond, but also to major spontaneity, unpredictable wholly.

This was the vision Lee, Ken and I shared (also Mark, with some perverse twists of his own). Odd for a chemical engineer, an electronic engineer and a couple of techno types; surely from such a crowd you'd expect more intention, more concern for who would use their tool and how. But the premises were more like this:

1) Tools don't shape the world, but they do determine the range of ways it can be shaped
2) Before they are institutionalized, they are toys; people play with them to find what can be found. In this historical moment the new occurs, the possibility of breaking through exists, there can be a joining of art and life.

It is that moment which moves this work; when the moment is past the more rational forces become important: the quality of the data, access to "serious" political people, aid for consolidation or opposition. But these only prepare for another such moment. The idea insists: the world is not changed according to plan, but by moments which run away from intention, the moments of "social" life.

(Efrem via Jude)

November 16, 1982 Philip

Michael,

My comments on the social emplacement are not articulate. You may take them to be squeals of anguish. A lefty ARPANET doesn't need my or your special expertise, nor are we the computing resource for the left. I think we're reliving the division manifested at Resource One. I ask myself: what are we trying to do that's special and unique?

Somewhat more articulate are my comments on the purpose of the project.

I consider a vision and a fact:

A vision: CM is revolutionary - if we're successful the feds will shut u down.

A Fact: When the polish government imposed martial law last year, they closed down the whole phone system for hours before going into action. This was to prevent counterorganization.

The implication is that we would make a mistake to think that our goal is to provide an alternative to communications utilities, and we are not tryin to provide a service, but to propagate an idea. We want to change the way people see the electronic communication utilities, i.e. not as an instrumen run by and for Them, but for Us. I argue for a completely open form, which corresponds to the society we are aiming towards (form should follow conten A flourishing Community Memory system lives on the active participation of its users. This is a practical application of mutual aid. My goals involve mutual aid as a way of life.

I consider Community Memory a tool and an attempt to claim a field of technology to be run in a different manner than say, the way the internal combustion engine is used in transport.

P.S. What does telecybernetic mean?

Efrem

Everyone who has worked at any aspect of the Project has an investment of energy and heart in it; but Lee, Ken, and Efrem have made investments that are different in kind from anyone else's. Every employee has in effect [made] a financial investment in it, if only through working at low wages; but Lee, Ken, and Joaquin have made financial investments different in kind from anyone else's. **These special investments deserve to be respected and protected as the Project moves into and through phase 3.** The money and support promised by these people should be promised with no strings provided certain initial conditions/expectations about what will be done with these are honored. Perhaps this arrangement and these conditions will be adequate to protect both their interests and the Project's, if these come to seem to diverge. But perhaps we should also give them, collectively, a special role in certain kinds of decisions made as the Project develops and changes. I don't think that just because they've got a lot of self and bucks invested they should be let run the whole show as it goes along. But the truth is that they have furnished the principal vision, perseverence, and funds that have brought the Project into this phase, and they deserve to have a large say in guiding and determining its next course.

What is Community Memory?

Community Memory is a name, a project, a myth, a political vision, a social technology.

Community Memory is a name for all the information stored and flowing in the community, from the great works of antiquity to the least everyday transaction, and for the complex system that processes it all. Community Memory is a name for a vision: that this system might be developed to make this information maximally available and useful to each member of the community, and to all. New cybernetic and communications technologies lend power to this vision, bring it closer. Community Memory is the name of a modest project putting these technologies to use in new ways in community information systems.

The present project began in the late 1960s, as experience with community switchboards, bulletin-boards, newsletters, newspapers, and radio stations brought its organizers to focus on the need to develop user-responsive, user-controlled community information systems to support community development and progressive social change. By 1971 they had begun to apply cybernetic technologies to this purpose, and the first small Community Memory system received its public field test in 1973-4.

The principles of a Community Memory system are simple, and political. Each member of the community has full access to the system's basic data and processing capabilities, and a fair share in determining at least indirectly how the system

itself is programmed and developed. Users are free to enter any information they want to, subject only to limits on its amount. The system is programmed to enable its users not only to describe and address their own information as they wish, but to help develop the very categories through which information is exchanged. It is programmed to help them learn how to do this, and to find the information they need, as well as how to use the system itself in the first place and how to help maintain it.

In these senses a CM system is convivial and participatory. But it is a more radical social artifact than these terms suggest. A CM system is an actively open ("free") information system, enabling direct communications among its users, with no centralized editing of or control over the information exchanged -- a medium of decentralized interaction, mediated only by the facilitative data, programs, and customs developed collectively within the system by its users.

Such a system represents a precise antithesis to the dominant uses both of electronic communications media, which broadcast centrally-determined messages to mass passive audiences; and of cybernetic technology, which involve centralized processing of and control over data drawn from or furnished to direct and indirect users. In reversing these habits simultaneously, at the marriage-point of these two powerful technologies, a CM system defines a technology of quite a different social character.

It supports a direct democracy of information, involving for its users not only the rights but the responsibilities of citizens of a democracy. The responsibility for judging

the worth and use of information is one's own, with what help from others one can find, as the system has no authority to certify what is true or useful. And the responsibility for providing this help, as well as the information itself, is one's own again, as the system has no sources for these other than what participants provide.

The payoff is efficient, unmediated (or rather self-mediated) interaction, eliminating roles and problems that develop when one party has control over what information passes between two (or many) others. This freedom is complemented by the way the system democratizes information-power, for no group of its users has more access to its main information than the least user has.

The simplest uses of a CM system with well-distributed public terminals perhaps involve the simple exchange of goods and services. A CM system enables even richer descriptions of wants and offers than bulletin-boards host; more flexible and efficient organization of data than newspaper want-ads can provide; and more immediate access to continually-updated information than either of these present (semi-) unmediated information exchanges offers. In thus facilitating direct transactions, its use erodes the power of "information middlemen" -- in real estate, used cars, employment agencies, educational administration, etc. -- to control transactions by controlling the information on which they depend, and to profit by this control.

Besides more efficient matching of community resources with needs, then, a CM system supports matching processes of a different social and economic character. Its use readily extends

beyond the narrowly commercial domain of buy/sell to more fluid exchanges of goods and services; and opens naturally to a freer and fuller indexing of the community's resources and needs than any medium more centered on commercial service could generate or support, or any agency smaller than the community itself provide. And a CM system can serve to facilitate direct relationships quite more subtle and complex than those of exchange, not only between individuals but among using groups.

The force of these general capacities becomes clearer when we consider the possible uses of CM systems in more sharply-defined communities. For though CM is described above as a fully public system for the general community, its principles apply again to an information system used by any sub-community, from a working group sharing one common terminal to an organization or network dispersed across the land and using many networked terminals; and such sub-communities are apt to develop the peculiar potentials of CM systems more intensively. For example:

* A community of "health care consumers" can use a CM system to generate a radically efficient and accessible public conversation recording and evaluating not only their own collective experience with conditions of disease and techniques of self-care, but also their experience with the specific practitioners and organizations of medical/health care who serve the community, as well as with their particular species of practice. In this collective data is comprised the actual "track-record" of all these practitioners, techniques, etc. To make it accessible to "consumers" can provide them with radically increased powers of choice and

action -- contradicting the very basis of present governmental regulation of health care providers and practices, which rests on consumers' inability to make informed choices; and working more generally to undermine both the monopolization of health care by mainstream medicine, and the relation of dependence between "health care consumers" and "suppliers."

* A network engaged in developing and applying solar technologies can use a CM system not only as an updated index to and compendium of their collective projects, methods, techniques, practical experiences, sources and resources of skills, material, and knowledge, but more actively as an interactional medium, to initiate and coordinate dispersed collective experiments, projects, and evaluations, as well as to open to individuals the advice and response of the entire community. Conferences/discussions around technical and social themes can develop with fewer constraints on their duration, extent, and complexity: recorded and cumulatively accessible, neither linear nor hierarchical in their processes, yet intricate and flexible in their self-organizing, self-referential structures. The tendency in all this is for the network, without any loss of individualities, to think and work more genuinely as a collective mind and being.

* A regional cooperation of small-scale farmers can use a CM system to deal similarly with agricultural data: methods and their appropriate variation, commercial and informational and neighborly resources, local soil and immediate weather conditions, generating again a collectively tended compendium of knowledge and resource of active aid adaptable to individual

need and supportive of collective engagement. But when such an agricultural community integrates its CM system with an analogous one in a community of urban food-consumers, a further potential can be realized: direct and flexible distribution of products from growers to consumers, each acting as individuals but functioning as collectivities; and in time direct contract for and deliberate direction of this production by consumers, again as collectivity to collectivity -- in both regards reconstituting the bases of economic relation.

* A human service agency can use an internal CM system to help collectivize information and discourse vital to the management of the organization itself, and to the practice of its services. To do so undermines the basis of both the hierarchical and the bureaucratic characters of management and organization, for both depend upon controls over information and its flow impossible to maintain in open systems. So does the culture of specialism itself; and by opening its CM system and the information and discourse this carries to the community it serves, an agency can help its clients learn to participate in their own service, dissolving the mystified discontinuity between professional specialist and layperson. This participation can be managerial as well as technical; and the sharing of information vital to decision-making with the "client community" through an interactive system can lead to new forms of community control, and to the dissolution of the very notion of <u>agency</u> as distinct from <u>community</u>.

These four examples illustrate some of the more complex social potentials furthered through open information systems. Each, within its particulars, involves a decentralized collective self-directed process of learning, as shall any other social development of CM systems. For the deepest characterization of CM systems may be to say that they form a compatible technology to support learning processes of this sort -- a technology for democratic learning.

The fuller potentials of Community Memory develop in a system extended to embrace all such subcommunities as the above and nearly universally and immediately accessible. Such a system can support an informed, direct participatory democracy in the governance of social affairs in mass society; and a similarly radical re-creation of the educational system -- though its role in these, as throughout the above, can only complement that of other media and face-to-face interaction.

No doubt it can support other wonders too, inherent in its being a partial concretization of the vision of collectivizing human consciousness democratically, to maximize individuation. It is essential to understand Community Memory in this light, as only a tangible metaphor. Though all the social-transformative processes discussed above are "naturally" facilitatable through CM systems, none depend on such systems for their initiation, existence, or character. Rather they stir together as continually regenerated tendencies in the anarchic, uncolonized substratum of everyday life and its discourse. CM systems are merely tangible tools to empower and amplify these tendencies. The anarchy of free information exchange, the ultimate social solvent,

persists despite information's modern socialization; but has lacked technological means to match those opposing it. In structurally facilitating processes of direct participation and interaction, CM systems can provide the anarchic spirit with means essential to the reorganization of mass society.

The fuller development of these potentials awaits the development of technological capacities to handle more information more flexibly, and the social will to explore their uses. Though some visionary extremes above are still impractical, the technological development has been proceeding more rapidly than the social experiment, and will likely continue to do so. Meanwhile, the present Community Memory project moves on in a modest, tangible form that will put a system of 20 terminals into public operation in San Francisco in 1980. Though functioning initially mainly as a computerized bulletin-board network, the system will have rudimentary capacities to facilitate every social process and development discussed above. Kindred systems exploring some of these potentials are already in operation (e.g. EIES) in non-public contexts; and initial projects on these scales, involving networks of up to several hundred terminals, are now feasible for a wide variety of sub-communities to explore.

Finally, the Community Memory project, in the small and in the large, is one example of a new variety of conscious social-revolutionary practice. Rather than working to reconfigure control over the present means of social production, this approach takes as its basis the emergence of new means, and seeks to influence the development of their social character.

MICHAEL ROSSMAN

Jack Taub Launches a $100 Million Information 'Utility'

It all sounds so reasonable when Jack Taub gets started talking about his latest project, you almost wonder why someone else hasn't already plunked down $100 million to start an information utility for the computer age. Taub has been at work assembling the multifaceted National Information Utilities Corp. (NIU) in his home base of McLean, Va., for the last two years, and so far has sunk $4 million of his own money into the venture. What he plans to do is to become a national supplier of computer information and services. Even before he has arranged to raise the $20 million that will get NIU off the ground or the $80 million he will need by 1986 to go national with an ambitious franchised expansion program, Taub is showing off an organization chart with his name above seven divisions, each the size of a major Big Board company. In a nutshell, Taub is thinking big.

But he's not thinking big alone. To help him assemble an instant conglomerate, Taub has already assembled an impressive team. Heading Taub's franchising division, which will supervise the startup of franchised regional information "utilities" around the country, will be Kemmons Wilson, founder of Holiday Inns. Stephen Wozniak, cofounder of Apple Computer, has committed to contributing about 20 hours of his week to running Taub's software and services group, which will function as a software "publisher," acquiring programs from programmers and distributing them electronically. Maurice Mitchell, former president of Encyclopaedia Brittannica, heads Taub's school-marketing operation. And Taub's board of directors includes Newton Minow, former chairman of the Federal Communications Commission.

Taub co-founded Source Telecomputing, also in McLean, which he refers to as "the first information utility" [VENTURE—April, 1981, "The Continuing Saga of the Source"]. Taub sold 80% of the Source to Reader's Digest a year ago, and substantially slowed his involvement. Now, he owns 90% of NIU, and he plans to maintain a majority share.

Paul Conklin

Taub is looking for entrepreneurs to help launch his multi-faceted venture. The plan is elegant, say some industry observers, but is it ahead of its time?

Taub recognizes that he probably will not be able to control such a huge company by hiring employees to run the various divisions. So instead of looking for employees, he wants entrepreneurs to set up and run his regional utilities. The utilities, which will use telephone lines and cable TV systems to sell subscribers data from data bases, and data communications services such as electronic mail, will be franchised. Taub will provide each franchisee and group manager with at least 20% of the equity, and will help finance the purchase as well. Taub also wants to invest in software entrepreneurs to develop products for the division run by Wozniak. In return for his investment, Taub will get 80% of the equity, leaving the software-entrepreneur with 20% of the stock in the projects and a royalty on sales. As part of his marketing drive, Taub plans to deputize thousands of school teachers to sell NIU's services and other manufacturers' hardware to school boards. Taub already expects to have one school wired by the end of the year with a mainframe computer on the premises and a $100 terminal on each student's desk.

Right now, Taub is spending much of his time trying to line up the initial $20 million he'll need to make NIU piggyback delivery of data over standard FM radio signals. And he has been able to set up a staff that plans to open the first utility in the Washington-Baltimore area sometime in 1983.

But even if Taub is able to raise the money he needs, he will face severe competition on several fronts. On the information retrieval scene, for instance, he faces competitors such as Dow Jones, McGraw-Hill, and even Taub's own 20%-owned Source Telecomputing. And other threats more distant on the horizon such as Warner/Amex, Time, AT&T, and IBM, could pose problems for Taub and his startup.

"The plan is elegant, but I'm afraid it may be ahead of its time," sniffs Robert Wells, an analyst with the Yankee Group, a Boston consulting group. "NIU will find a lot of competition, and from very strong companies, so the question may rest on Taub's staying power. And remember: There's always a tendency to dream and tell tall tales."

But Taub claims he may be able to charm some potential competitors into joint ventures with NIU. "In some cases," he says vaguely, "our technology will match up with their products and if we can work a good deal, we will." So far, though, the only joint venture Taub has signed was with the National Public Radio (NPR), which gives NIU access to NPR's 17 earth stations, which will send NIU data to satellites, and to NPR's 272 radio stations.

Taub's NIU has so far provided all of the financing for the joint venture—about $2 million that has gone toward developing the "black box" used to receive data sent over National Public Radio's FM signal. The black box, which Taub will sell to subscribers, consists of an FM receiver, a microprocessor, a filter, and a decoder that unscrambles data sent out via NPR'S FM side bands.

NIU will use the joint venture, dubbed Information Network Corp., to sell information that can be simultaneously delivered to millions of subscribers. By broadcasting its software and data services—everything from a computer "game of the week" to the ability of a restaurant chain to quickly change prices system-wide—Taub is able to save subscribers the price of lengthy phone calls to existing timesharing services. Although the technology only allows one-way transmission, Taub maintains that interactive, or two-way data services will eventually be only a local phone call away to the local information utility.

The only other joint venture Taub will talk about is a $20 million deal he says he is negotiating with a "telecommunications and information" company he won't identify further.

The one thing Taub expects to sustain him through the project is his entrepreneurial spirit, which he hopes will permeate the organization. Says Taub: "It's the one thing our competitors don't have, can't have, won't have." —*Kevin Farrell*

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- -

E.T. is a 'co'

Casual storing of information -- attach (attribute,value) pairs to an object. Thread pairs along common attributes (b-trees).

Trip to Acadia could be paid for; give talk on some advanced topic.

Either in conjunction with that (ideally), or separately, part of Kingfisher software costs should be a stay in Nova Scotia to bring up --Sequitur
--design commons
--design cm

"context necessary for development being playground"

--protection, economic and psychological. You can't worry too much about bread and butter, and some kind of personal discipline of relaxation in the midst of pressures is necessary.

A university environment can provide one such context. Or, a research institute -- are Bell Labs and Xerox PARK examples? Therefore, C M Research Institute.

Where would the funding come from? Could be a private R & D company, with both private and public funding (maybe matching federal money, + tax incentives).

The psychological context needs a vision of the whole, within which the play is seen to be creative. Some kind of healthy psychological tension, vibrancy, both personal and societal.

Etc. etc. Various notes enclosed, composed at various times.

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the cursor in space

blinking

---

words, shapes, colours, perceptions, thoughts, plots

form

---

mind is occupied with its projections

free your mind

Notes for Community Memory Project

1. Organization: Heaven, Earth and Man

--Heaven: vision, accommodation.

--Earth: practicality, circumstance.

--Man: mediates between heaven and earth, politics.

So the king joins heaven and earth.

In the same vein, inspiration connects vision and detail.

It is the role of leadership to provide such inspiration.

2. Development and perfection.

The distinction here is between developing a product, and, once it has been fundamentally developed, perfecting it to be a truly useable and human tool. This applies in a particular way to software, which is not a static end product, but seems to ever more clearly entail an ongoing relationship between the users and the producers of the software. The "perfection" group mediates between the R&D group on the one hand, and the community of users on the other.

The union here is that "perfection" stays in touch with both sides. R&D develops and incarnates the bones of the vision; perfection listens closely to the the experience of users (the bread-and-butter, earth), and thus acts as "man", using earth to flesh out the vision into ongoing life. This implies a viewpoint of compassion in regards to software as benefiting people. On the other hand it can't be too grandiose; perfection stays within the limits of what R&D has developed and simply performs the humble task of truly manifesting what has already been created.

Regarding Pacific Software and Community Memory Project, I think it would be beneficial to limit "view" somewhat right now, and concentrate on perfection. Perhaps out of that could emerge appropriate cooperation between perfection and research and development.

3. Leadership makes the whole situation possible, uniting purpose and economics. R&D creates beneficial tools, perfection works with their use by people, and the people (users) return benefit (money) to the organization. Leadership cares over this process. From this point of view leadership has custody over politics; it creates the context for the care (carefull work, but not politics) exercised by R&D and by perfection. Decision-making can be shared by a very few people, the process involves everybody's communication back and forth, but ultimately the leadership says yes or no, because it is leadership's specific task to care for the whole context.

Humbleness is democratic and universally applicable (especially

to leadership); leadership is by nature hierarchical and individual. It is a fantasy to wish to share the loneliness of care. The leadership is he or she, or that small group, which sees a way from heaven to earth and from earth to heaven, and accepts responsibility for opening that way. However, opening the way to all does not mean diluting the responsibility among all. The obstacle to accepting such a view is loneliness; the deception is thinking that the group can be trusted while the individual cannot.

How is trust established? The way to that is identical with the path to discovering one's own basic confidence: nonaggression which conquers fear. Then things can be seen more simply, beyond one's dramas. We need some way to establish societal discipline, confidence and joyful energy; that way can only be found in an environment filled with personal practice. Universality of personal practice creates humbleness.

If you have a vision of how to proceed, proceed, inspiring others. This, however, amounts to leadership. It is more effective to lead in this way than to convince others that they happen to be leading in the same direction, and that therefore no one is leading. Certainly cooperation is necessary; why is it amazing to think that it's possible in a hierarchical situation? Though heaven is above earth, they cooperate; seeing their natural order, man cooperates. Confidence in the natural sanity of heaven and earth breeds confidence in leadership.

Policy Decisions

Michael

X.Dot Commission

X.Dot License (Source) } for Non commercial or CM uses.
Sequitur Source License }

Revised Non Disclosure Agreement

→ efrem

October 20, 1982

Dear Community Memory:

Since the Community Memory membership meeting is next Tuesday, I thought I'd let you all know what I'm up to and what my position is on my (currently non-active) membership.

A. What I'm Up To.

I am a full-time employee of Yates Ventures, a market research and documentation company specializing in the UNIX operating system. Currently I am co-authoring a book called A Business Guide to the UNIX System, which goes to press at the end of this year. Once the book is in the hands of the publishers, I'll be helping to write A Programmers Guide to the UNIX System, and I plan to do a book on advanced text processing and computerized typesetting.

B. Why I'd Like to Come to Meetings.

I am curious and hopeful. I feel that this time is a new beginning for Community Memory. Events of recent weeks seem to have resolved some internal conflicts for the group, or at least restructured the ways in which conflicts may be resolved. There are new people, new energy, new broadsides in circulation. It seems to me that the Idea of the Community Memory communications system has enough vigor to survive both its originators and its disciples, and I'd like to help actualize its Form. I have a strong desire to participate both in the design discussions and in pragmatic, real-world activities leading to the installation of a trial node.

C. What I Want.

I want the chance to listen, and to be heard, in discussions of design and implementation. I want continuity: a bridge to my four years of work that ended, awkwardly, almost a year ago. I want to redeem the time I spent then by helping this project succeed now. And, parenthetically, I'd welcome the opportunity to associate with people other than capitalist sharks and techno-moles.

D. What I Don't Want.

I don't want, need, or expect employment with CM. My writing is a separate, major preoccupation that will continue. I may be available for occasional contract work with CM -- but let's wait and see. I can't presume much on the basis of past performance (performances?): I'd like to get a fresh start with you, myself, without any formal relationship at this time.

E. How All This Relates to Membership.

My feeling is that if a category called "Associate Member" existed, that's where I would currently fit. I'm not available full-time, but I want to hang in and hang out for some number of hours per week. It is to be hoped that the membership of CM will grow, based on people's recognized participation and commitment.

F. My Happy Hobbyhorse.

It's your party; you can cry if you want to. But why can't this project be fun? Despite all the "profoundly serious" issues that will continue to be debated again and again, I think that this project should generate enthusiasm, pleasure, and high good humor among its workers. If we can't enjoy the process, the product may emerge as tense, worried, pedantic -- having a crumple fan-fold forehead and few if any friends.

See you Tuesday.

-Sandy

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HERESIES FOR COMMUNITY MEMORY

1. There is no Community Memory Project now. There is only a bright vision, which has not been updated or upgraded for several years, and has not been reality-tested for nine years. There is also a group of people whose energies for the past three years have been largely subsumed in creating commercial software products and a marketing mechanism for these. In the sense that the marketing is meant to fund a CM project for which some of the software may prove useful, there has been a certain continuity. But in effect the group became the Pacific Software Project long ago, and has only recently begun slowly to turn its attention back to an original intent which in the meantime has grown somewhat vague.

2. This locates the group in a crisis of transition, made more complex by a similtaneous inner crisis of transition. A founding member, whose role has been crucial both in technical expertise and in the group's internal difficulties with its own work-process, has departed for at least a while, leaving several vital issues up for grabs. Can the group reconstitute and extend its programming capabilities to do what needs doing? Can it work together more harmoniously and effectively? How will its power-structure be reconfigured?

This last question highlights a general issue now re-emerging as the group turns back toward the original track, no longer the same group that left it. What will be the relation among the Old Guard, the Newer-Now-Old, and the Newest, and indeed those to come? Who will have what say in determining the vision and the way its bringing-about is managed? This question and the tensions that attend it -- not only between old and new, but between "techies" and "non-techies", men and women -- have been submerged, are re-emerging, must be faced and dealt with. The problem of determining an inner constitution for the CM group is no less important, and of higher priority, than determining a constitution for the operation of CM in the field.

All these issues of crisis, so present psychologically, obscure the fundamental crisis of the vision itself. Does a CM Project make sense; and what is it, anyway? I think it's necessary to treat this "return to the track" as a formal discontinuity, and in effect begin the Project again, asking and answering these questions from scratch. Much of our answers may remain unchanged from old versions. Even so, to rehearse them will recenter us in mind and spirit, and prepare us better to tell/convince other people about them. And we might learn some new details, or even come to some different conclusions.

3. It's in this spirit that the notes below are circulated. They are random observations made while reading Steve Johnson's survey of the current action in information systems. I title them "heresies" because some contradict hitherto - unquestioned elements of the old CM vision.

4. The idea that private and group-private use of CM should be avoided, and the action confined to public centers where users would encounter and "interact with each other" (when not riveted on the screen), and thus offset the alienating force of the technology, is passé, a rustic fantasy. It never made essential sense anyway, since the humanizing thrust is to produce <u>through the system itself</u>, rather than through the circumstances of its emplacement, the sorts of interaction which lead to personal encounters (or which save the wear of needless encounters!)

This is a key problem of humane system-design. We've been distracted from it by our comfort with the image of the bustling CM center, an outer environment so like in spirit to the (idea of the) bustling warehouse hive from whose basement the first CM field-trial was run. But do a few scattered centers make practical sense? Who wants to trot all the way downtown everytime they need something? "Well, they should," says ideology. But will they? Competition is developing rapidly; it will be very few years before most of the "progressive people" we're most concerned with serving by CM have each, at home, Osborne-like power and a comfy modem hookup to a wild array of information-services that will cost them no more than CM-use will without counting the gas/time to get there.

is starving the group we should not start out serving,

"Well, our system will have a data-base that people will really want/need, because they'll put their valuables here." Perhaps. But remember how it went with organic foods: you used to have to go hunt up the tiny shop, but now it's on the supermarket shelf and the little shop is out of business. Granted, ordinary commercial pablum-data won't fill the needs we care about. But if we don't field a CM that can work just by people calling in, someone else will, even in our own community -- I suspect our survey will show several contenders in the field already -- and such competitors will have a considerable edge even in acquiring valuable data-banks, since who wants to trot downtown everytime they have something to contribute?

in France videotex may be an every home deal in a few years that has not been true in Britain or Canada. The home system Knight has not succeeded in Britain.

Centers may still be useful and perhaps even appropriate for a demonstration project. They may be useful in the longer run as a way to induct/recruit random people ("the public") into ongoing participation in the system -- though the non-random process of people turning their friends on, which will proceed in any emplacement of CM, will be the main recruiting/induction dynamic. But a person will come to the

center to use the machine to get what s/he wants (including perhaps contact with an appropriate other person) as efficiently as s/he can, rather than to hang out and engage in conversation with random interesting others. No, the task of designing interaction through the technology rather than around it only must be faced -- but what do we know about that?

4. Centers also involve the Bottleneck Problem. Briefly put: a 20-terminal system could accomodate perhaps 1600 brief uses a day by experienced users; but a publicly-situated system would be more apt to induct 500 users a day at most in half-hour learning sessions. How long would it take to accumulate a data-base of more than superficial content and interest? To type in serious reference-lists, address-lists, etc., takes hours; could such a system ever begin to operate as more than a mechanized Classified Ads, unless its stored data were seeded massively and maintained by its managers?

Granted, the early field-trial of CM was exciting even in the superficial databases it accumulated, as witness the star example of musicians forming a few groups through it. (And also around it; and such useful dynamics would of course continue in any specialized center like a record-store in which a CM terminal stands.) But tomorrow the Musician's Switch will become the 301st Electronic Bulletin Board and every musician will have a friend with a modem, so scratch that example.

Conclusion here: we need to think about specific kinds of databases and about database sizes. How big a base becomes interesting/useful to whom? How long will it take to self-generate in the system, how can you seed it? What self-generateable public databases are already destined for other systems? Perhaps the route to go, even for a pilot project, is to peddle a CM network to a network of groups (within one domain, or linking several) who have enough motivation and coherent energy to seed data-banks capable of serving and establishing the serious potentials of the CM form.

5. About that old, hallowed field-trial. Our admiration and fondness for it are justified, but we must remember also that it was in another era, two years before the microcomputer market opened. Most of the excitment of the trial came from people getting a chance to lay hands on a computer for the first time, rather than from what they accomplished through it. Now that a million micros are abroad, the pizzazz has decayed. A public terminal may still be a novelty, but people will be more interested in what they can get through it.

6. The CM system was conceived in isolation, to operate in isolation, during an era when information services customarily operated in isolation from each other. Since then two orders of development have occured. The number and variety of information services have multiplied dramatically; and processes of amalgamation have lately begun among them. The edge of the field -- and, I think, of social progress in it -- is now no longer (only) to organize specific services, particular flows of information for particular populations, but rather to weave the services, flows, and populations together systematically.

What this means for a vision of a CM project, I don't know. At one extreme, it might interface actively and aggressively with many other services. Think for example of the Electronic Bulletin Boards of the anit-nuke and other activist networks; the ACLU and Sierra Club databanks; the conferencing on community development in the EIES-net. Such kinds of examples will multiply rapidly in our own community.

The least a conservative CM could attempt would be a comprehensive up-dated on-line guide to where to get the information one wants if it's among the 99+% of information readily available but not here. A purist view, of course, would shrug off the establishment and maintenance of this directory as being the responsibility of CM users to create. But this rather begs the question of how one can design a prototype system that hits the ground running and takes off fast enough to thrive in an environment where all sorts of other systems are competing for participants. If this sort of information is available and a definite bonus to provide, why not exploit the potential to the max?

A more radical CM would in its operation open into, rather than simply point to, such other services. A first version of such a CM, providing "single-point" (single-system) access to services to extend user-generated databanks, could even now be undertaken by networking together several data dources from the progressive community (e.g. the on-line Sacramento legislature analysis), under some arrangement less commercial than mutually-exerimental.

No doubt other examples extending beyond our ghetto are possible. The key to conceiving them is to abandon the unspoken assumption that all information available through the system must be participant-provided, and to ask instead, since it seems essential that CM systems be designed to support themselves, "what will be useful to the people a system serves?" and "who can we buy it from at a price they can afford?"

If I'm not mistaken, the main difficulties involved in accessing other services through a CM system are not technical but social, in making the arrangements. It does seem, though, that the time is ripe for such amalgamative effort.

The example I give is even of a sort that might get funded by a grant, reluctantly though I raise this buried notion again.

7. One direction of extension deserves special note, because it doesn't fall within the obvious domains of survey of electronic information services. Small publishers in the West are turning rapidly to electronic editing/typesetting. From the standpoint of public CM terminals, so what? But if CM operates on a call-in basis, it could access books directly to print through in-system exchanges between reader and publisher. This way of deepening the system would function more dramatically (and most naturally) in a "dedicated" CM, i.e. one serving a purposeful network whose special concerns certain publishers served. Of course, as a purist one could again simply wait for such arrangements to happen "naturally" through an unguided public CM. But if they could be prepared as part of seeding a prototype, why not do it?

((more to come))

8. Marcy's papers "Proposal for Social Studies" and "[untitled]" make a number of points so vital that I won't try to recap them here. They are essential to the planning process, and should be re-read and expanded -- especially the issue of financial planning. The next few notes relate to other themes of her papers.

9. It's essential for us to survey in detail the current action and short-to-medium term plans of all significant community-information/computer-service projects -- both to learn what we can, and to explore possible cooperations. "Well, sure," everyone says. But it's a major project. There were none only yesterday, now there are many (8? 12?) We don't even have a systematic set of questions to guide us (my recent draft might help, but it lacks any reference to technical or social data relating to possible cooperation, and no doubt much else.) We don't have a mechanism or the personnel set up to make sense of this research and to share the sense. I myself can't do it all, or even most; and anyway to have one person do this alone and deliver a digest report is inappropriate. The material and need are such that a core of people must search it and think it through together and bring their thought to the full group (or whoever makes decisions ... who was it?)

This (sub-)project is so substantial partly for simply mechanical reasons. For each project we must track down the available paper information, digest it, have a longish conversation with someone at its core, digest that, relate it to other projects. (That's 6-10 hrs @, not counting follow-up.) But it's also substantial because (if I'm right) we're not sure of what we want to know and do, don't have a clear plan that itself defines narrowly the relevant data. Instead we must enquire more tentatively and openly, aware that there's no patent or inside track on social design, and that a number of people perhaps even as bright and dedicated as we have been making their own sense of the same landscape of resources, needs, and potentials.

So we need to plan and provide for this part of the planning process more explicitly and fully. This is a heresy of sorts simply because no aspect of social planning has been explicitly and systematically provided for and carried through in the whole history of this project. There is no reason to believe that social programming (planning) is any less tedious, detailed, and coherent a process in any of its stages than computer programming is; or that any less-careful organization of the work-force can accomplish it effectively and efficiently.

10. Marcy's untitled paper exposes two tensions:

(a) between the visions of a public CM open and inviting equally to all, and a dedicated CM, in particular one employed by the action-groups of progressive politics; and

(b) between the visions of a system in which not only information but the social relations developed through the system are fully user-provided and -organized; and one in which both data and social relations are seeded, with determinative force, by the system's organizers.

CM's discussion of and choice among these alternatives has hitherto been a matter of rather abstract ideology, leaning strongly towards the first alternative of each pair. Meanwhile the social realities unfaced since 1973 have themselves changed, in ways that should force us out of ideology to discuss and decide these issues on pragmatic grounds.

For the context we face is sharply pragmatic. Each aspect of the development of communication systems displays a hyper-Darwinian struggle for "survival of the fittest". The market for computer products is a mock-up of the market for social products, and its lessons are clear: (1) Things move very fast. (2) Small leads and advantages multiply to become insurmountable. (3) Anything can be leapfrogged. (4) A well-designed product goes nowhere by itself. (5) Marketing takes at least as much energy and creativity as design. (6) Undercapitalization is suicidal. (7) Myth and hype sell; critical public opinion catches up slowly at best. (8) The total package is necessary, or all goes down.

There is also, as evident through the story of CP/M, a lesson unknown to the Darwinists and Social Darwinists of former times: (9) **co-evolution:** it is the cooperative ensemble of species rather than the individual species that survives and evolves. On both intellectual and practical grounds, this should lead CM planning to conceive it as a coordination of various species of social effort, within the field of information/communications itself and again in the broader social field.

I suspect that the phenomena and dynamics of development-and-marketing in the "apolitical" commodity market for computer products will be a more realistic and clearer guide to the problems a CM project faces than will any model(s) drawn from classical (1960-1980) experience with social organizing. I propose, as a concrete activity, that we schedule a short session to refine this draft list of "lessons from the commodity market" and clarify what they mean in this context; and then take a longer session or perhaps two to systematically discuss their application to theCM problem.

(more to come?)

The State of the Shop -

① Programming is getting done.

② Sequitur is crumbling around the edges, as it design principles are eroded.

③ X.Dot is pulling together, but very slowly

④ Little real selling is getting done.

⑤ Tom is back so the acoustic space is unbearable.

⑥ Every I have not read the last 3 issues of the JCC.

⑦ Miller does not seem to be above small lies (and possibly big ones) to get his way.

⑧ Judging from Herbs experience, Kevins experience, and my experience Terre is probably not workable with. Seem a 16 year old brat.

⑨ Carl often appears to me as slightly psychotic and very disturbingly and ~~sub~~ subtly hypocritical.

(10) Chris?

(11) The manual appears to be the most visible thing wrong with sequitur.

(12) The mental environment dropped 10°c when Ward left.

(13) Philip is falling apart and [redacted] even when he's not, every difficult to both live and work with.

(14) Even the most conservative companies seem to have more substantial ~~senses~~ senses of social responsiblity while we hide be hind fear, more left than Thoreau and general weak minded political analysis.

(15) Ken is rarely around, frequently angry, does things in a fitful manner which frequently disturbs things or people more than it helps the situation.

(16) Jude is not very productive, and deals with the group mostly by hiding.

(17) Miller has a job, managing a marketing effort which he is completely incompetent at.

(18) Lee is acting less crazy, but is still impossible to respect as a designer.

(19) I am frustrated, angry, unfriendly and twitchy I avoid coming in while there are people about. I am trapped either in business like stuff which I've only the most marginal competance if any and programming which I hate. I'm sitting on a bunch of interesting and valuable ideas which I feel I could no more release to this group than to Xerox or IBM.

(20) The only hope for ~~#~~ Pacific is a very skilled hiring of a few key people which seems unlikely with either Miller or his committee doing the hiring.

(21) Given ~~the~~ some good people Pacific probably will need over 1/2 million capital to take that route.

(22) $6/hour is too little to live on in 1982.

(23) Any kind of <u>honest</u> financial analysis I attempt is opposed, but no one is actually doing the real job.

(24) Do or do I not have some kind of overall design responsiblity for sequitur, if not what as a design not a programmer am I doing in this organization.

SCENARIO 3: Vulnerability to Sabotage Dictates a Form for CM

Michael Rossman 14 Feb 83

In the present domestic social environment, CM systems are vulnerable to a simple, effective form of "legal sabotage". A corporate competitor or mischevious individual is free to enter and even to advertise text "liberated" from copyrighted sources. If the system carried major or frequent infringements, "cease-operation" injunctions would be sure to follow.

A CM system itself has no possible defense against this form of attack. The only approach is to "police" the database (much or most of it, at frequent intervals) to delete unauthorized (plagiaristic) entries. But human gatekeepers can't be familiar with the text of all proprietary information. Imagine the Source or some other service feeding the CM system its data with one devious hand and suing with the other.

A CM system is likewise defenseless against the insertion of libelous or defamatory material. Here some degree of control may be possible over the more obviously questionable material [my "Health CM" scenario considers a stricter form of such control] -- but again, CM gatekeepers can't usually know when information about who did what might be actionable.

All this applies to CM systems as we have mainly conceived them so far. This possibility of libelous accident or sabotage has been the main one the CM Project considered in the past. It led us to think in terms of posting a disclaimer on CM's door ("the system is not responsible for the accuracy of any information it carries"); and somewhat more dimly in terms of seeking some sort of protected regulatory status for public information utilities.

Even these approaches were naive. But putting the system's vulnerability in terms of the copyright problem rather than libel makes them appear even less hopeful. "We're not responsible for opinions" might excuse malice, but property rights have a stronger claim that will manifest not in individual damage suits but in systemic injunctions. As for the regulatory climate, how can we expect a system that makes possible piracy and cheap reproduction to be protected, given the trend with the cassette and videocassette industries?

A public CM system enables anonymous Robinhoods or saboteurs to give away what others would sell, as well as to publish a curse to the whole community. We applaud the former in the spirit of anarchy, if we don't write for a living; but the CM system itself as we've conceived it offers no answer, nor even the hint of a direction, to the question of how to restructure the economics of information's production. We smile away our co-responsibility for the curse, trusting that Millsian common-sense and instructive community gatekeepers will steer the user

straight.

In short, we've rather dodged these issues, preferring to hope we needn't face them at first, any more than the Classified Flea or the Coop BB do, even while dreaming that the system might serve more potent instructive and argumentative uses.

Suppose instead we take them as fundamental, dictating certain characters of any CM system in the (public) field:

(a) The system discourages false information and stolen information, if not directly then by ensuring that responsibiliy for providing such information is legally assigned.

(b) The system encourges the provision of useful information.

Character (a) points directly to "membership" CM systems, in which each input item must be tagged with the unique identity of its provider. This is implementable as easily through public on-site terminals as through remote-access systems, since member-users can have employ a magnetically-=coded card at the terminal. This doesn't change the essential public character of a system, if membership costs are kept nominal; but it does complicate the spontaneity of starting to use the system as a provider.

User/provider codes go naturally with non-concurrent billing schemes for system use; and also with in-system schemes of royalties to providers, fulfilling (b). [There's more discussion of this in my second ("CCM") scenario.] These system-characters are optional, but character (a) may not be.

This line of reasoning winds up with a system resembling the Source, Compuserve, and other profit-oriented systems, indeed almost isomorphic. Perhaps we should look seriously at their models and determine the minimal additions/changes that would make them adequate CM systems.

Assume at a minimum one use per user per week; and proficiency enough to make the average use-time ten minutes, with each public terminal in use 80 hrs/week. Then one terminal can support about 500 users; and 250 terminals could serve all of Berkeley. Note that a flourishing CM with a rich database can be expected to have denser traffic, up to three or more uses per user-week. At this density one terminal supports about 160 people, and 750 would be necessary for Berkeley. Either figure works out to around one terminal per city block here (more per block in denser "vertical" residential areas.)

This suggests one natural emplacement of an urban CM system, as a network of public terminals distributed in precisely this arrangement, one per city block. Various locations in shops, private homes, garages, etc. might be sought. Their costs would be tolerable (averaging less than $1/month/user or 8¢ per use) and they'd encourage certain kinds of interaction among users; but unattended sites on private quarters would probably prove unmanageable in many neighborhoods.

An alternative scheme, to supplement such placements or replace them entirely, is to put a terminal at every street intersection (this provides one per square block.) The terminal would sit in the strip between street and sidewalk, taking its proper place beside such other civic utility structures as stop-signs, streetlights, telephone poles, and phonebooths. A Lexan faceplate and relatively userproof keyboard would be necessary; but each unit might be hard-wired to adjacent phone lines. In Berkeley the terminals' shelters would be open redwood structures wrapped by climbing wisteria, with Lexan on three sides down to waist-height to shelter from the elements; elsewhere they might more resemble phone booths, but be open enough or large enough to encourage interaction.

Emplacing and sheltering the terminals in this way would significantly increase the system's capitalization costs ($1,000/terminal?) It would of course also require an advanced state of acceptance of CM systems, at least in the neighborhoods that would request that City Hall permit such emplacements. But it would in the end be the most economical way to extend a <u>publically-located</u> public CM system through a town. At saturation use (3 uses/user/week, everyone using) this emplacement cost works out to 1.3¢ per use over three years. It bears comparison also with the ongoing costs, in any other scenario, of an indoors-sited CM system.

For there's a limiting factor to consider. So long as we think only in terms of a 20-terminal system, there's no problem about conceiving indoor sites with hospitable and attentive hosts. But if such a pilot system prospers and a community wants it extended towards a "saturation" system, the problem of siting grows acute. We have thought of civic, commercial, cooperative, and service establishments as public terminal sites. But even in Berkeley there are not 750 such that would be willing and able to host terminals. Most potential organizational hosts are concentrated in a small fraction of Berkeley's area; to rely on them is to reinforce the patterns of communication and influence they represent, and to leave most areas of the town with very few nearby terminals.

Indeed, if a pilot public system does prove successful, we can expect pressure from "underserviced" areas to get their share. Some public siting in private (non-organizational) properties may be negotiable, but it will probably prove much more expensive and difficult to manage than the "streetcorner civic utility" emplacement -- suggested here as the natural form for system expansion to tend to, if remote access is prohibited.

November 17, 1982

I was more than a little surprised at the recent papers by Efrem & Jude, because they propose a radical "solution" (dividing the organization) to a problem which, as far as I can tell, doesn't exist. None of the design meetings I have attended regarding CM have focused on anything other than a public system. There has been no talk of mailing lists, private terminals, or private data. The only variants from an "ideologically pure" CM have been the introduction of world trees as an option, and some discussion of how we would provide dial-in access if we later decided to do so.

The picture of "thing X" set forth by Efrem characterizes the focus of the group's efforts very well. Thing X is not being abandoned or forced to take a back seat. In fact, more concrete progress has been made towards realizing thing X in the last two months than in all the rest of the time I've been here. If this is happening despite the pressure of another Comdex rush, I can only project that even more rapid progress will be made starting next month, if we don't divert our efforts by a major reorganization.

I resent, as I always have, Efrem's implication that nothing worthwhile can happen without him. I don't wish to minimize Efrem's contributions to the project, and in fact a lot of his ideas are reflected in the work we have done recently. But the fact that the project is no longer under his direct control does not make it second rate. On the contrary, I think it has been an altogether healthy and productive change.

We have finally begun the work of making CM happen. I oppose dividing or diverting that effort.

—Carl

Berkeley
18 November 1982

Dear Friends:

I have studied the document "What Was Community Memory?". (I didn't read the optional historical diversion).

I agree completely with everything Efrem says, except for the next to last paragraph.

I do agree that the situation could be dealt with by developing two separate institutions. I do not believe that it is best dealt with in that way. I would prefer to see the Project ease back onto the track and move ahead. Others can take care of building Y.

Your,

Miller

P.S. The only other material I have seen on the subject is a complex anonymous document which may be Michael Rossman's.

NOTES ON ISSUE 3.(a,b.)* ..... Rossman, 11/18

*** CM as a public system**

1. Efrem's 11/16 paper "What **was** CM?" makes some important points about the public character of the original CM vision, which are not undermined by his premature conclusion that the Project's infection by unnegotiable heresy can only be cured by chopping it in pieces.

The operational issue is whether, how much, and how this public character should be attempted in the phase 3 field-test system. This should be decided on the basis not of an old hallowed vision, but of present sight about what makes sense practically and morally. I can't speak for others of heretical tendency, but I myself think the public character is essential and should be central.

To put it provocatively: our vision of CM has two distinctive characters: (a) public access, and (b) unmediated interaction. Strip them both away and what's left is nothing unique, only what several groups elsewhere are probably already attempting within the progressive community's networks -- worthy work, but worth pledging hearts and fortunes to? [Strip only (a) away and the conclusion <u>appears</u> to be the same; I will return to this question below.]

If there's general agreement on this, then the "Principles of Unity" draft (1.0) can be changed to make clause (b) [fully-public access] the top priority in section 3 [emplacement of the system], and make clause (a) [progressive-network service] a lesser (or equal?) priority. With some minor obvious editing of these clauses, I think this accomodates the constructive thrust of Efrem's critique.

2. I think also that there are many reasons for us to make progressive-network service a strong priority even if a lesser one. These include the native sympathies that most of us share; the prospect of immediate support [though E. is quite right about our childish fears of encountering the world outside our ghetto]; the promotional value of putting the tool to use in the subculture that pioneers explorations and changes for the rest of the society to pick up on; the value of early study of the system's operation with highly-developed user subcommunities; and no doubt others.

The essential question is whether we conceive and take this priority to be in conflict with the "fully public" priority, or to complement it vitally.

I take it as complementary. So far as I understand, there are only three arguments among us to suggest that these

priorities conflict:

(i) Myth conflict: The myth of a "dedicated" CM might overshadow or leave stillborn the myth of a "public" CM. This is in some ways a genuine problem, which can be approached by making sure both that the public component of the system is substantive enough to generate myth, and that whatever publicity and interpretation we can affect emphasize this aspect of myth properly. It is also less of a problem than it appears, for reasons sketched in (6) below.

(ii) Operational conflict: we may not have resources enough to organize and implement both priorities properly. This is a definite issue, which we can hardly consider seriously without some estimates of the dimensions of and necessary resources for adequate field-test of each/both priorities. [See (7) below for some first notes on this.]

(iii) Ideological conflict: helping progressive networks will contribute to the entrenchment of their bureaucracies, which will directly contradict the social good we mean to accomplish through an unmediated public system enabling an ultimate decentralization of power and organization without bureaucracy. Though solid on the surface, I think this is in the end a bogus or illusory argument, based on subtle but fundamental misunderstandings about the nature of a "public" and the influence of unmediated communication within organizations. [More on this in (4-6) below.]

Taken together, the actual substance of these three arguments seems to me not to outweigh the strong reasons for understanding and making progressive-network service a complementary priority to public service, provided our resources can test both adequately.

3. We talk of "publics" and "masses" loosely, as if they were amorphous, structureless entities in contrast to the organizations and networks we move among. This notion reflects mostly our innocence, for the public's and masses' space as wholes and each individual's space within them are intricately structured by formal and informal organizations and conscious and unselfconscious networks. To emplace CM in "public" is to open it to use by these various levels of structural association as surely as, if more slowly than, it would serve these levels within the progressive community.

4. Conversely, in thinking of a CM system's use by an organizational network, we may tend to forget that organization members are also people, who together form as genuine a "public" or "mass" as can be accessed through random grocery-stores and libraries.

Consider two competing emplacement models, proposed here

only for their heuristic value:

(a) N terminals dedicated to fully-public access, plus N devoted completely to organizational purposes; and

(b) 2N terminals emplaced in an organizational network under the conditions that no one but organization members can use them and that 50% of the use of each shall be dedicated to strictly non-organizational uses by members.

Suppose also that the memberships in (b) are large enough to use all of the "nonorganizational" [i.e. "public"] time. Then what's the difference between the two models? Such basic uses of the system as we conceive for the "masses" -- to buy used cars, form string quartets, brand bad chiropractors, distribute food, enjoy decentralized political discourse -- will be equally open to development by the masses of these organizations in their "public" terminal time. So far as I can foresee, system uses under these two models would be identical, not in detail but in functional character and also in the myth generated within the using community.

The main difference would be that (b) involves a narrower public [in terms of culture, age, etc.] I do see some reasons to try to involve as broad a public as we can in the field-test; and of course to have a fully-public face to the system. But let's not forget that the public character of the system applies (or can be made to apply) as fully within our own organizations as with the unknown masses.

5. The "general public" seems wildly diverse in comparison to the network of progressive networks. But this contrast will not be so great in actual practice with a field-test system, for two reasons. First, we are pretty wildly diverse, in all aspects other than common political sympathies, literate culture, and to some degree age and color and class (and even within these aspects.) Second, considering only the fully-public dimension of a field-test, at any terminal site and to some degree throughout the whole small field-test system, the potential diversity of the public will be sharply restricted in actual use. As sub-communities of users form, they will tie up substantial portions of the limited terminal-access time available. When we analyze the character of these subcommunities' memberships and transactions, we are likely to find these no more diverse than would be the case for use-subcommunities formed from a "Movement" public.

6. In fearing a CM system's potential for strengthening organizational bureaucracies, we underestimate the socially-solvent character of non-hierarchical interactive communication systems. I want to attack this point head on, for the issue is critical to our attitude about "helping Movement organizations".

Consider a CM system functioning in the belly of the beast, i.e. within an ordinary corporation. If it were genuinely open to employee use, we'd expect it to host a dynamic collective conversation by the "masses", discussing what policies and practices and supervisors were wrong how and what to do about it, supporting and organizing action. More generally, as the information on which decision-making is based becomes more fully shared, hierarchical relationships of authority based on information's scarcity and control become delegitimized and functionally circumventable.

I'm sketching complex dynamics very briefly; but in both regards it's clear that a genuine CM system is subversive of bureaucratic/authoritarian systems and is socially-solvent, tending to dissolve such prior structures and to enable freer and less-permanent structural reconstitution. **We should expect this solvent character to operate as much within Movement organizations as within a corporation or in full public use -- provided that we impose conditions to CM's use by organizations that will protect fully-open access and unmediated use within the organizations.**

This brings me back to the seems mentioned at the end of (1) above. Though fully-public access is a unique character of the Project, I think its more essential uniqueness lies in the solvent character of unmediated intercourse; and think that this will by itself, regardless of emplacement, tend to develop the social values and goods desired in the original vision of CM as a fully and simply public system.

7. Regarding the dimensions of a public test-system, wherever emplaced: consider for comparison the Classified Flea Market, which traffics only in goods and services (not ideas, etc.) The CFM as a system inputs about 2000 ads a week, of which I'd guess 66% are new and 33% repeating. Its output is harder to estimate: it claims 300,000 readers and puts out about 100,000 copies. Let's suppose 200,000 users access the CFM weekly; and that the average access consists of a search for something specific within one catagory and a browse of two other catagories.

How large a test system would be needed to at least match the CFM's utility? I assume these parameters: (a) half the users are new to the system, taking 20' apiece for their turns; (b) experienced users take 10'. Collective input time is negligible compared to collective search time, which would be about 7,100 hours/day. If terminals offered fully-

public use for 12 hours/day, the system would need about 600 terminals to transact the CFM's business.

A smaller volume would still demonstrate utility. But if the CFM is an accurate guide to the numerics of the kinds of transaction it serves, then I doubt we could get by, for this demonstration, with less than 1/6 as much transaction-volume as the CFM serves, i.e. we'd need a minimum 100 terminals. Take a look at the CFM: 1/6 of its ads is a pretty puny amount. The CFM's statistics suggest that 100 searchers and 200 browsers per ad provides a level of service adequate for the ad-inputers, and adequate for the searchers too -- for though they'd prefer less competition (a lower searcher/advertiser ratio), the competition at this ratio is clearly not too much for them to find the medium useful.

On the other hand, the Shattuck CoOp bulletin board carries aroung 400 ads, with a nominal two week life. Figuring 5 searchers on the average spending 4 average minutes for a 10 hour day gives about 5,000/week, or a 25/1 searcher/ad ratio. If these estimates are right, by the the parameters above it would take 1250 terminal hours/week, or about 15 fully-public terminals, to duplicate the utility of this single bulletin-board.

Even this last estimate is a sobering prospect, planning-wise: 100 terminals would imitate six CoOp bulletin boards or one CFM with nothing left over for the more interesting and important uses of the system. For this is how it would tend to on the public face, of course: what people so far know how to do with a public-access communications system is precisely and only what gets transacted through bulletin-boards, telephone pole postings, and want-ads. There's no reason not to expect these uses to dominate the system for a long time. [What did the phase 1 test reveal about the ratio of such uses to others?]

The fatal bottleneck in such calculations (which are essential to scale-planning for the system) is the time-per-user-at-the-terminal. One picks up the CFM in an instant in passing and scans it at home or office at leisure; fifteen people can stand before the bulletin-board at once; either transaction takes 1/3 the time the quickest searching at the terminal will. Note that [if I'm right; what do the phase 1 test statistics reveal?] I have estimated average-terminal-use time conservatively and only for simple transactions. Keying in text, writing comments, reading comments, cross-checking for comparisions -- all such operations are likely to increase average use-time and thus decrease the user-load the average terminal can support.

Nobody wants Community Memory to be a mailing list or service bureau. But this fear, which I share, seems to foster an attitude which shortchanges or ignores the importance of getting existing community and political groups involved in Community Memory. Another fear which must be taken seriously is that without the involvement of the already-active people, Community Memory will never become more than an electronic Flea Market.

We should try to imagine scenarios that get already existing groups with whom we feel sympathetic everything they need and want.

There are three functions that these groups would probably find appealing:

1. Office tasks.

2. Networking between groups (e.g., a network of health care activists, or of disarmament groups).

3. A public access computer system (i.e., Community Memory). Most if not all of the groups I'm talking about would be very interested in and committed to a democratizing communications tool.

Why is the involvement of these groups important?

We are not putting the Community Memory system into a social vacuum. The scene which we hope to affect is a large one, but we can't do it alone. We must have the active support and participation of the people whose ideas and world views are closest to ours. These people tend to be already involved in "social change" activities. We should think of Community Memory -- as a communications tool -- as supporting their work and helping them involve other people.

Some groups are already thinking about computers as communications and networking tools. Peacenet, for example, sees this as a crucial part of its purpose.

These groups have the resources that no money can buy: the energy of their organizers, the active interest of their members, pre-existing networks of communcations (word of mouth, newsletters) that can be augmented and complemented by Community Memory.

The interest in computers and the people that would be involved in computers as office tools will very likely overlap with those involved in computers as communications

tools. We can use this overlap to our advantage, or ignore it and alienate many people.

What if we don't involve these groups?

I am afraid that without the participation of these people, the Community Memory database will remain largely trivial. The most meaningful content is likely to come from people already involved in social change activities. Of course, we hope that Community Memory will provide an entree for many others, too. But it would be easy for Community Memory to get stuch as an electronic "Classified Flea" or a computerized personals page. These functions are OK by me, but far from enough.

In addition, if we truly want Community Memory to belong to the people who use it, we need the organizational prowess of these groups and their constituents. Otherwise we will in fact become a "service bureau" -- a different sort than the one of the Resource One nightmare, but a service bureau nonetheless.

Some preliminary ruminations: How can the three functions (office tasks, networking between groups, public access) fit together. Is it possible or desireable to do it all on the same system? For example, require that any group that wants to do [redacted] on Community Memory also have a public terminal? institutional networking

Office tasks and group networking could both be accomplished with microcomputers. But the conferencing software available for microcompters (e.g., Communitree) is still pretty inflexible. And this scenario shuts out "the public" from access to what may be very intersting databases.

Group networking and public access also "fit together" logically, and perhaps could both be provided for by a Community Memory system. But groups will want some way to have private conversations and information exchange. Would Community Memory be willing to provide this?

-Marcy

Power Issues in CM

After yesterday's meeting, I was thinking about the three topics for next week, and I realized that the one I had thought would be the worst problem may, in fact, be easy to resolve.

At issue has been the decentralization of power. We all share a political background that argues for such a decentralization in theory. The main sticking point has been the maintenance of the Community Memory Ideal: something which was purported to only be understood and held by a select group.

In the time since the power issue was last discussed, Efrem has published a paper containing the outlines of his version of the Community Memory Ideal. To me, one of the most striking things about this paper is that this first attempt to "explain the seed idea behind Community Memory" does not break any new philosophical ground; it is what I thought Community Memory was all along.

If this is a widely shared impression, then perhaps we have not yet reached, or even approached, the point where the membership in the organization is too diverse to be trusted with the guardianship of Community Memory. If this is the case, then there shouldn't be any objections to allowing ultimate power to be held by the current CM membership.

The adoption of this strategy also has implications for the process of accepting new members. We have suggested "political compatability" as one of the criteria for membership. With recognition of the CM Ideal as belonging to the arena of public knowledge, we can develop a commonly accepted yardstick of what political compatability means.

I think it is possible to reach a consensus on the power issue next Tuesday on a basis similar to the one outlined above. I would strongly prefer to do that expediently, and devote the majority of the first meeting to sizing up the shape we want the pilot and the project to take. If anyone substantially disagrees with my estimate of the situation, please try to get your ideas heard this week, so that we can begin the meeting Tuesday with at least a feel for how much of problem this is.

—Carl

WHAT WAS COMMUNITY MEMORY? (first edit) - efrem

This is an attempt to do something which I guess has never actually been done, though I find it surprising: explain the seed idea behind Community Memory. Unfortunately I have not succeeded as well as I'd like, but I don't seem to have the option of polishing the work. It can be thought of as a outraged response to Michael's "Principles of Unity" to which I am preparing a more point-by-point response. I hope it explains why Michael's "Principles" are not about Community Memory and shows that Marcy's two papers were so upsetting because they were based in a conception of CM alien to the one that was intended for this project, though one to which the organization has been drifting from lack of examination and praxis. Further I will try and bring to the surface what I believe to be the "non-personality" component of the current breakdown and why the only just solution I can currently imagine is to split into three groups with three different purposes and three different organizing principles: One to sell software, one to do computer support and networking for progressive organizations, and one to continue with the project of incarnating something, which in 1973 we called Community Memory. These groups will share some common technology, but will exist for very different reasons, which while not contradictory are of too variant a nature to be held by a unified organization.

So what was Community Memory? It was an idea which grew out of the experience of doing a system we called Community Memory. The idea is that people in general (the masses) have a lot to say to each other and they will take the oppertunity provided by an unmediated, open-access communications medium to say some of it. Further, that such a conversation of the people is inherently revolutionary.

(Most of my long stated doubt about the project is not of this core idea, but about the suitablity of computers to create the right medium)

Thus Community Memory is not alternative telecybernetics.

It is not a conversation on the left.

It is not a converation led by the progressives (a **soft version** of the vanguard party theory).

November 16, 1982

It is a publically managed public conversation. Its allies may be progressives, but its clientele is the public, the same as Prestel's, CBS's and AT&T's.

AN OPTIONAL HISTORICAL DIGRESSION

Let me flesh out the idea with some of its history. Its nature can be traced to what Lee and I were doing prior to Resource One and to a lot of Mark's influence. Lee had worked worked for a number of years on two newspapers, the Berkeley Barb abd the Tribe. After the Tribe folded he attemped to start a neighborhood, reader-written paper. The original project he was working on at Resource One was a common filing system on the computer so that switchboards could share information. That project did not work. The switchboards were nervous about sharing their files and not enough organizing energy developed to get passed the resistance to the idea.

My story properly starts with a strong dose of the chaos of politics as practised by the southern movement in the 60's. But for brevity I'll pick it up at San Francisco World Game in 1970 where Mark and I meet both Ken and Jerry Barenholtz. World Game was supposed to be a bunch of people implementing a giant computer simulation of the globe. Actually it was about 100 people, many artists, looking for innovative ways to change the world. (Ironically, I was currently pretending to work on a model of the whole US economy for the Federal Reserve Bank.) There was a lot of interest in computers, but generally I steered the group away from them as large distractions which could easily cause a dangerous over concentration of information. There was interest in making a list of everyone in the country doing social change work. I hope every one knows that in the 1930's a promising revolution in El Salvador was cut down at birth by the government which had obtained the mailing list of the central organization and used the information to locate the leaders and find threatening concentrations of radicals.

After that I worked with an unsuccessful attempt at an alternative college. A central idea was that everyone had something they wanted to teach and something they wanted to learn. After it folded, I took a straight job with a military contracter and spent my time hatching the idea of a learning exchange using a computer to keep track. I sabotaged the contractor, then returned to the west to work with Lee at Resource One and to implement a learning exchange.

The idea of public terminals was the direct result of my open-access learning exchange ideas meeting Lee's work on shared switchboard files and underground newspapers. I suggested we get around the impasse with the switchboards by putting terminals in public and letting people do their own work of maintaining information. We did it.

At this point came the combination of Mark's influence and the impact of actual experience. Mark saw the importance of non-instrumental communication, the meeting of people and ideas via the system. The users proved him right. They used the system as a flea market, but more one of ideas than things.

Lee increased our concept base with the idea of community established by communication rather than locale. I formulated the idea that society lacked both easily accessed broadcast media and successful many-to-many media, and that the establishment could not afford the existence of such media.

From the work Mark and I did at the alternative college came the idea of a viral bacteriophage - style injection of information, a political move that the establishment could not defeat because it was spliced into the very systems that the establishment was depending upon for survival.

After this we closed the system, practise stopped and theory froze.

What it means to resume this process is clear, what the result will be is not.

END OF DIVERSION

There is a thing X, the goal of a conceptual and political process a decade old. There is much to be said and learned about X. The question is not whether Community Memory is X or X is Community Memory, but whether that process is going to continue or is its energy going to be subverted to other goals.

Michael's "Principles" is not about X, but about a computer conferencing system with a progressive constituency and some public access. Marcy's paper is about a system with much more public access but heavily weighted toward the needs of organizations, especially progressive ones.

X by definition must be based in the public space. If after a moderate amount of stimulation it is only an advertiser that we know that there is either something wrong with the idea X or we did not implement it right. We will have learnwd something about X.

Building a system concentrated in a space of organizations and progressives is a completely different idea. The needs of that space are different and the measures of success are different.

X is an idea about communication which seems to be demonstratable with computer based communication. Marcy and

Michael are both presenting the use of telecommunications by a constituancy different from the ones that currently employ telecommunications. This is a perfectly valid idea but even though it would use a technology similar to that of X it is essentally a different idea with a different goal and different requirements. Lets call this idea Y.

A network to meet the needs of Y could be implemented on a mature version of X, though not the other way around. In its early stages the requirements for X are very different and there are simpler more reliable ways to create Y than trying to piggyback it on X.

Specifically -

1) The X network needs to be 2 to 5 ORDERS OF MAGNITUDE bigger than the Y network. It requires new technology. A Y network can be built with a combination of Unix UUCP network and ARPA net technology.

2) X is a public system and needs an ethic supporting wild energy and public performance. The Y network will have a greater demand for order and confidental information.

3) The technology for doing Y is the same technology as the office automation technology which is the current HOT money tech. Using what is developed by the market place will assure not only networking but a full range of the office applications. Rather than creation from whole cloth a Y network only needs filling in of missing pieces.

4) In an X network there is initially little need for computational services, though they may become interesting later.

5) The X network must establish itself in the world of Videotex, not the world of office automation.

6) X and Y will attract different kinds of energy and different types of people to work on them.

7) It is unlikely that it will be possible to buy X type networks for a long time and then like anyother media product they will be very expensive.

What is the genesis of the current split in directions? It is old. We have always been attracted to organizations. Ones like NCAT offered us the possiblity of testing the technology with someone elses money and without compromising our politics. We concentrated our early siting search on left organizations, probably because they were people we knew and going out into the raw public world is scary and alienating. Without a pilot system we have had a very hard time testing out thinking and have let tendencies develop

without examination. One tends to stay in the universe of one's friends.

The last amplified sheds light on the immediate situation. There is more to the difference in directions than opinion. The people interested in a progressive and organization oriented system are more usually involved in the world of progressive organizations and left politics than those interested in a public system. I've rejected the formal left as a politically useful base for myself. I can respect other peoples desire to work in that community, but I believe this difference in communities of identity is the unrecognized force behind the attempts to redefine the goals of the project.

I think it is best dealt with by developing two separate institutions with different goals and likely different structures. Then everyone should pick the one they want to work with (working with both being possible) and the resources divided up approximately by the historical contribution of the members in each group, tempered by the fact that the whole owes its existence to CM. Both organizations would have rights to use the software currently developed and a proportional interest in any profits from the software. If either group folded or became inactive ownership would completely revert to the other organization. The organizationally inclined group would need another corporation. The groups should exist in different places and meet as frequently as work and common interest demanded.

Then I think Principles of Unity might be possible.

Efrem

NOTES TO DRAFT 1.0

1. To put it so forces a certain issue. I think it may be useful to conceive our next work, and hence our redefined/reaffirmed present identity, in concrete and limited terms. The phrasing above also suggests that we should put off discussion of "principles of confederation/licensing", publicity, etc., until the next phase looms more concretely. This probably makes good practical sense. It's somewhat at odds with our former notion of designing publicity in from the start -- but only somewhat, because the operations of study and feedback proper to this phase will spread news and myth of the system in appropriate communities. The phrasing above also scants the question of whether there should be a present basis of understanding about the possible transition to/constitution of a fourth phase.

2.(a) (*) It will be useful to specify a rough estimate. (**) An important issue here: should the field-test system prohibit any sort of dial-in use; or should we hold open the possibility of "branching" the field-test to explore some dial-in mode and its integration? (***) Is some detail about the technical means/modes of interconnection & common access appropriate here?

2.(a)(i) This draft supposes a single "node" with multiple terminals. If we intend several interconnected nodes, it's appropriate to say so or at least to make the possibility explicit.

2.(a)(ii) A note about the mode of interconnection within the node (among nodes) may be appropriate.

2.(b)(i) (*) Is it proper to specify further here, about world-trees, front ends, keywording, etc.? [Note that keyword-power pertains also to 2.(c)(ii).] (**) Are particular software developments relevant to this? If not, it belongs in a later catagory.

2.(b)(iii) The idea is essential to design; have you a less awkward phrasing?

2.(c)(ii) [See first note to 2.(b)(i).]

2.(c)(iii) Two issues for discussion are hidden here. To state this principle flatly rules out

our prohibition of commercial uses ("exploitation") through and of the system itself. If we contemplate any such prohibitions, we'd do well to make them explicit here. Also, in the other direction, this phrasing says nothing about the system being designed to encourage/enable the development of certain kinds of relationship. Perhaps we should be explicit here too; if so I'd appreciate your try at a brief phrasing.

2.(c)(iv) This item, though muddy in phrasing, involves several important issues: (*) Will "private" communications, conferences, files, etc. be forbidden, permitted, or enabled, or held as an active possibility? (*) What degrees of privacy-protection are actually feasible; and are they sparse and questionable enough that we should instead rephrase (iv) to warn that privacy's impossible? (*) The ability to address and privatize messages/input opens also to the formation of exclusive groups ("clubs") in the system's social space. and perhaps to modes of commercial and political exploitation through the system.

2.(d)(i) The issue here: what would we like? what is feasible now? what might be added in mid-test-run? Should we instead say "future stages may provide"?

2.(d)(ii) I'm sure there's another item here, technologically speaking.

2.(e) Here fit certain ideas about hardware specifications: cheapness, user-serviceability, standardization, interchangeability, redundancy (and perhaps others.) It will be useful to specify briefly which of these will be implemented how in the prototype, distinguishing this implementation from what may be attempted in a next phase. In these specs it may be useful to treat user-interface hardware separately from non-interface support hardware.

2.(f) This is in a sense a variation on the "phone-link" issue. But even in a terminals-only system, hard-copy output and input from disc files will be very useful to individuals and perhaps essential to organizational uses.

2.(g) This is a significant issue. I think recent developments make accessing "outside" databanks, bulletin-boards, etc., not only useful but necessary. The technology may be more practical than the bookkeeping and financing involved. But

we must decide whether this kind of linkage is a priority to pursue in the field-test.

2.(g)(i) Bringing several services on-line of interest to progressive community groups may be a move welcomed both by the services and by the groups.

2.(g)(ii) Users should be able to put new services on-line indirectly, by asking CM Central to do so; and we should say so, but elsewhere. This policy issue fits here only if they are to be enabled by the system hard/software to do so directly. [Note that the issue is not visionary but immediate: the field-test system will be a direct means of communication among a number of community groups, some of which may already be hooked in to other services (paying for them, and/or qualified as gatekeepers to them) which many might find useful at certain (coordinated) times.]

3.(a)(ii) A significant issue. I don't agree with the choice phrased here. I think that studying and establishing the system's usefulness within [for] a focussed network should be as high a priority for the field-test as is the "networking across networks" that the system would aid in a Fort Mason-like emplacement. These are two somewhat distinct and basic modes of the system's use; we expect it to be a powerful tool in each. Both for our learning and to promote CM systems in the world, the field-test should be designed to explore both modes substantively. [If we do site at Fort Mason, we'd do well to pick one network with a node there (e.g. anti-nuke) and distribute 4-8 terminals to other nodes of this network in our locale.]

3.(b) I put it so to push us to decide this issue now if we can. Our old vision, of a an essentially-public system within which sub-communities/networks might grow naturally and be empowered, was noble and we may well wish it for the future. But in between, we face the pragmatic task of gaining a strong toehold in social space, in the scramble to hook people into services. And we know where the CM system and myth will sell best at first. Both our native sympathies and practicality thus incline us to make the focussed, "semi-dedicated" use of CM [in our peer-base] a higher priority than pure public use, if our resources for field-testing can't serve both explorations amply. [We don't want CM's general myth and promise to be obscured by an initial

appearance of dedication to some special purpose or network. But it's self-defeating not to develop a basic power of the system for fear of giving it a reputation for that power. We should rather encourage even a "dedicated" network use in the field-test, while taking care to design it to test equally its "semi-dedicated" use across networks and its "undedicated" (fully-public) mode.]

3.(b)(ii) There is more to be said here. The public emplacements should relate to each other, for if the user-groups each generates are related to each other, the system will function more powerfully and concentratedly for them. [Think of the sites spread randomly in S.F., versus being concentrated in the Mission. Think creatively; there may be other than geographic strategies for relating such "general public" user-groups.]

3.(b)(iii) (*) As this requirement has been strictly expressed in CM's early designs -- one at least specifying a minimum 50% of time/bandwidth for public access -- we should re-affirm or modify it now. It may be useful generally but hard to reconcile with some particular terminal emplacements exploring semi-dedicated uses. (**) On the other hand, host organizations might well be required to allocate some system-use to their members as (public) persons rather than for organizational purposes.

3.(c) This is related to the call-in issue, but independent.

3.(d) Do we agree that Lee's lucky pot won't last forever, that P.S. won't be an infinite cornucopia, and that any ongoing and/or larger CM will have to support itself? If so, the field-test must test this too. The main question may be whether this must be planned for right from the beginning, or whether there'll be cash enough to run a substantive system for one to two years before even beginning to test its capacity for self-support.

3.(e) An issue I think we should postpone for the future. We're doing a field-test, not yet constituting an association. I don't think we'll need to talk about the issue when we try to emplace the field-test; but if we're forced to we should have a pretty concrete model to suggest for the future.

3.(f) (*) This is a formal niceity that belongs in any future "constitution" of a CM system, which we should already make explicit. (**) The issue here again is a laissez-faire approach, versus direct and active efforts to influence the system's internal development and culture. My vote is for the latter. There are probably additional measures beyond this one [and 2.(b)(ii) and 3.(a)(iii)] to be planned; what are they?]

4.(a) I assume one will be inadequate. A brief scheme of the functions to be served in system monitoring would be proper to this section.

4.(b) At issue here is the question of whether the **Journal** is to be conceived and continued as part of the Project; and more generally of what audiences we want to report what to at what stages (plans, preliminary reports, etc.) We will have quickly to contend with local journalists once we begin operation and probably even before that. How we respond, what we stage, is already an issue in advance, which I think we should deal with as an important (though non-software) part of defining what we're doing.

4.(c) (*) We need to establish, and perhaps to include in the main text, a rough sense of the magnitude and duration of the field test. How much data and study are enough, for what purposes? How can we know when we're done? These questions are essential if we're inviting ourselves/others to sign on "for the duration", as well as to guide planning and the staging of our energies and resources. If someone would draft rough estimates and check-points, it would be helpful. (**) It's well to note that each obvious clause like this that we subscribe to commits us to staffing and organizing the sub-project that it entails.

4.(d) The shortness of this list is disturbing. Study of the results is as integral to the field-test as designing and emplacing the system, We can't plan study all in advance, but we should have more detailed and concrete beginning plans than are referenced here.

5.(a) This forces a key issue -- but really, folks, it's necessary to settle who gets what say in which decisions before we make them. **The strategy of this document is to codify a common understanding of the (updated) vision of the Project's original organizers, in a form that will satisfy them and that others can subscribe to; and**

then to put remaining and emergent issues and problems in care of a larger common council which will include them as (distinguished) peers. There are other ways to handle the problem of power and the transition from phase 2 to phase 3 of the Project; but phrasing this one flings the gauntlet: any alternative must be phrased as clearly and concretely, and soon. This strategy provides for a smooth and clear transition from phase 2 to phase 3. If you choose it, Old Guard, beware: you will be inhibited from swinging special weight if you later have second thoughts or distress about decisions -- so now's the time to get your heads straight and clear about what you really do think and feel is essential.

5.(a)(i) Here fits a description of membership criteria, or at least a reference to the CM Bylaws. Revise the Bylaws or not, the criteria still need to be clarified now, before the staff and hangers-on multiply, else the work-environment will not be healthy.

5.(a)(ii) Have you a better proposal?

5.(a)(iii) The strategy here is to conceive this common governance as applying only to the phase 3 Project considered as a discrete episode. It's clean; but it leaves untouched the question of how a transition to phase 4 might be handled, who might play what roles in reconstitution. Is there anything we can say about this?

5.(b)(i) This is mainly so that no-one can pull the plug (without pre-defined cause) on money that's been promised to the Project. but it may serve other useful functions as well. [In a context where someone has already rashly fantasied to take back what he'd given, vital to the whole, because he didn't like what was happening, the Project should protect itself as best it can from the chance of other such confusions.]

5.(b)(ii) But in truth, I'm less worried about anyone denying promised money than about the reverse inequity, which I think is more likely. For it's as proper to protect funders against CM's vagaries, as to protect CM against theirs. Unfortunately, this clause offers no real protection. Nor did the stronger form of its first draft: "The Project's financial sources will be entitled to exercise veto power over decisions whose implementation will involve substantial cost increases. [*] It will not be exerciseable over

decisions involving only reallocation of funds already allocated or promised."

We probably can't use such phrasings in any formal document because of legal/tax reasons. The confusion between members and funders is complex, and we do need to sort it out formally for everyone's good. I meant to justify this stronger form by observing that this veto power was there anyway and we might as well recognize it as legitimate in kind, governing it by the second sentence quoted above.

But on reflection I see that neither sentence is equitable. The first might in effect leave the Project unable to seek elsewhere for additional funding for implementations its present funders disapproved. As for the second, it protects the Project from "outside" interference, but leaves its backers open to a certain form of blackmail. For given the investment of themselves that Lee and Ken (at least) have made, and given who they are, how can they be expected to respond if in a year the Project membership redistributes its funds to support changed decisions which they disagree with, in a way which appears to require no additional overall funding but which in fact, in their opinion, leaves some vital aspect of the Project dangerously underfunded? It's likely that they'd feel forced to contribute more money, perhaps more than they should. I don't think this is right; but I don't see how to protect against it.

One approach might be to insert some clause like this at [*] in the quote above:

"This veto can only be exercised collectively by representatives of [members associated with] the funding sources, who will define their own decision-process."

The decision-process might be by majority vote; or might weigh contributions proportionately, 51% being neccesary for veto; or whatever. These "sources" would include P.S. and C.M.'s own operation if their contributions prove to be substantial. This approach has the advantage of somewhat collectivizing the other end of the problem of **accountability to the funders.** It would both reinforce and moderate their influence, and might leave them feeling more supported than they might otherwise -- particularly if these phrasings were modified to require the collective of funders[' representatives] to approve any Project assessment that a proposed implementation-change would indeed involve only a safe redistribution of allocated/promised funds.

Efrem

PRINCIPLES OF UNITY FOR A COMMUNITY MEMORY PROJECT

Version 1.0

0. What is this document; why; and how?

We need a document describing the grounds of common agreement and commitment that are the basis of the (Berkeley) Community Memory Project as it resumes. We need it to help make our own understandings clear; to settle certain policy issues for the present; and to help deal with membership issues, both within the present project and in possible future developments of a CM system.

This draft invites collective input and revision. We will discuss it in a meeting, either regular or special. Before then, to save time and encourage/prepare participation, please read this draft; think about what is right, wrong, and missing; and return this copy to my box with copious notes in the wide margins provided for same. **Please return it by Tuesday, 11/15.** I will read everyone's annotations, and make a second draft and circulate it for a few days before the meeting. Hopefully people's annotations will make our areas of agreement, vagueness, and disagreement each clear enough that we can deal with these efficiently.

This draft has been prepared after re-reading eight previous descriptions of the project by various authors (I probably missed some others.) 95+% of their content is devoted to the project's history, why it is necessary and admirable, the remarkable goods it might accomplish, what the user will/should feel, and how to extend a small local node into grand regional/national/global networks. This draft ignores most of that, reduces the rest to a minimum, and tries instead to describe what we are actually attempting now in modest and concrete terms. We are making a prototype tool, getting some people to try it out, and studying the result. The minimal agreement we need concerns the shape of the tool, who we will get to try it out and how, and how we will study what happens.

In the text below, [brackets] enclose certain optional phrasings or ideas; please mark them with a check (✓) if they should stay, a cross (**X**) if they should go. The asterisks (*,**) refer you to the separate **NOTES.** Some key minor questions, but many indicate significant issues which need to be settled early in the planning process. Please comment at least with checks and crosses for agreement/disagreement, and ?-marks for "yes, it's a real issue, but I'm not sure what we should do."

1. Purpose and scope of the present Project

Our purpose is to help develop alternative [liberatory/democratizing] forms of telecybernetic communications media, for their intrinsic utility and as counterexample and counterforce to the dominant [authoritarian] development of these media promoted by the capitalist economy.

this is the core error. the nature of the communication proceeds, does not follow the technology. the next fallacy is the idea that CM exists to serve progressives, if they are its principle users than the project is unnecessary, the commercial world will supply them.

The vehicle of our purpose is a Community Memory [CM] system. This Project's first phase [1970-75?] designed and field-tested a primitive prototype system, and studied the results. Its second phase [1977-82?] explored topics in the social design of a more sophisticated system; established a journal of kindred thought and purpose; and developed software to help fund and implement a more advanced prototype system. This third phase [1982-85?] of the Project is devoted to the design and field-testing of a substantive prototype CM system, and to studying the results.

The present Project is neither designed for nor committed to a next phase.* If the results of the field test are sufficiently encouraging, a fourth phase of the Project may be constituted to tend a CM system on an ongoing basis, and/or to organize and administer a network of such systems.

much of the past work such as SX.DOT + #even sequitur are in direct opposition to this statement.

2. Social-techological specifications of a prototype CM system

making the trivial points optional seems a strange way to define a unity.

(a) The system will have, as its public interface, a locally-distributed network of [how many?]* [smart] terminals,** specially configured and programmed, accessing a common data-base.***

(i) *

(ii) *

(b) Each terminal will provide every user with [full] system-assisted access to a shared and mutable body of information, and [full] means to contribute information to this body.

(i) The system will provide assistance directly via software for searching and sorting,* and indirectly by facilitating** the development and operation of user-generated forms of assistance.

(ii) Though we will contribute or organize an initial substantive "seeding" of the system with information, the field-test will be designed to proceed until information contributed [input] routinely by the using community supercedes "seeded" information as the primary stuff of transactions through the system.

(iii) [To encourage the cooperative development of extended and evaluative transactions,] the system will emphasize facilities [utilities] enabling its users to link their entries bireferentially* to entries already stored.

(c) The system will be designed to facilitate [and emphasize] unmediated user/user communication.

(i) It will impose no more constraints upon the forms and contents of communications than are legally[, fiscally,] and technologically necessary for its operation.

(ii) While furnishing tools and schema of catagorization,* to help users access and make accessible information, it will also enable [and encourage] the development of user-generated catagories, schema, and tools.

(iii) As information-exchange underwrites and governs relationships, it is well to state explicitly that the system will be designed to impose the minimal necessary constraints [as in (i)] upon the relationships conducted and/or developed through it.*

(iv) To the extent the system provides for differential access to information, it will as much as is possible enable users to control access to the information they provide.*

(d) The system will be designed to facilitate the self-directed development of cooperative groups and communities of users.

(i) It will provide facilities and backup utilities for real-time and asynchronous conversation/conferencing,* [on a scale appropriate to the system's size.]

(ii) *

(e) *

(f) The system's terminals and programming will enable users to interface [a wide range of] their own input/output devices and programs.*

(g) The system will enable users to access directly a variety of separately-established information services.*

(i) As part of the system's "seeding", access will be provided to services of particular interest to the "primary target community" (see 3.(a) below.)*

(ii) The system will enable users to interface external information services in ways accessible to other users.*

3. Social emplacement and the user community: parameters for a prototype system

(a) The first priority of system emplacement will be to explore the system's usefulness to a network of socially-purposeful [progressive] community groups.

bullshit

(i) It will be emplaced to network groups in one geographic locale, rather than in scattered locales.

(ii) It will be emplaced to network groups working in diverse domains, rather than in one primary activity.*

(iii) The field-test will invite participating groups, and train their representatives, to use the system to share and coordinate their informational and other resources and activities.

(b) Another [lower]* priority of emplacement will be to explore the system's use as an unchanneled and fully public utility.

This completely violates the concept.

(i) A [lesser] number of terminals will be placed in sites [such as libraries and stores] frequented by a general public.

(ii) *

(iii) Groups contracting for custody and ["semi-dedicated"] use of terminals may [will??]* be required to provide [and promote and/or assist] system access and unrestricted use by the general public.**

(c) No terminals will be emplaced in private custody,* and each organizational host must serve a broad public through its activities and/or directly at the terminal site.

(d) Though the prototype system's field test will be financed [almost entirely? largely?] by the Project, it will be designed to test the feasibility of financing future CM operations directly through use-fees [from groups and individuals.]*

(e) Groups hosting and using terminals of this prototype system will be given no formal [constitutional] power in governing or modifying the whole system.*

(i) They will be encouraged to modify the system by developing its uses.

(ii) The influence of their feedback as users will be actively solicited by the Project, both through the system and in direct interactions.

(iii) They will be invited actively to participate in the Project's study of the entire field-test, and will be informed of its results as these accrue.

(f) [Though the Project will avoid any direct influence on the operation of groups using the system,]* it will actively recruit and train "gatekeepers" ["librarians", "information shepherds"] from the user community, and expedite their work within the system.**

(g), (h), ... [this list is surely incomplete]

4. Study of the field-test

(a) Several* terminals of the system will be maintained on-line in the Project offices, to enable access to text and statistics of the system's operation.

(b) Reports of study will be issued from the Project directly to kindred groups, and through the **Journal of Community Communications** to a broader audience.*

(c) The final report* will summarize and analyze the experience of the phase 3 field-test; and if appropriate prepare recommendations for the system's continuation and extension/multiplication in phase 4, and the Project's reconstitution to accomplish this.**

(d), (e), ... [again, there's surely more here]*

5. Governance of the field-test project

(a) All decisions about principles, parameters, and issues [of design, emplacement, operation, governance, funding, study, and publicity] not specified above will be made or delegated by the full Project membership [staff?].*

(i) [Membership will be ...]*

(ii) Decisions will be consensual when possible, by majority vote when not.*

(iii) This arrangement will prevail for the duration of the field-test and its study, terminating when the final phase 3 report is issued. Any further phase of the Project will necessitate a complete reconstitution.*

(b) (i) All [financial and other] relationships with funding sources associated with members [staff] of the Project shall be made contractual and unconditional, save for conditions of performance specified by mutual contract.*

(ii) The [resources and decisions of its] financial sources will exercise a de-facto veto power over any Project decision whose implementation will involve substantial cost increases.*

close)? Do we want to?

Do we have money to spend on carpeting?

24) Development of C.M. educational and propaganda plans.

What is the relative priority of the Journal? What else needs to be done? What are the implications of how the times they have a'changed to the packaging of C.M?

Educational: How much training and what kind will be needed for users of the CM node? How do we educate people to the idea of CM as well as to its use.

Propaganda: A publicity campaign? Or maybe several:

1) Aimed at users
2) Aimed at the computer world
3) Aimed at supporters (groups, funders, etc.)

25) Who is doing the kind of laison we need to keep up with other people and groups working on related projects? There is, for example, a group in Berkeley working on the development of a municipal information utility. There is the effort to market Sequitur to non-profits. (incidently, is this taken care of in the contract with Pacific?) There are other groups, at least one in Boston, that we should be keeping in touch with.

As to people, there's those like Tim Haight, Karen Paulsell, etc. who would probbly have useful input on any working papers we disseminate.

26) What is the proceedure we are going to establish for the final development of the technical design for the front end? How are we gonna schedule it relative to the other things, like hardware design and organizational development and development of a coming-out plan? Where is the big timeline?

27) We should clarify responsibility for all the equipment here -- what is CM's, what is Pacific's, what is Golemics'?

28) What kind of relative priority does resolution of political/structural issues like those raised by Rossman have? How should we proceed?

① publicity for CM : OK for TV. journal? PR? liaison?

② Marey putting out ē JCC Ø → 30 hr/wk

no journal?

③ construction

re-order space at large?
enclosed spaces : Caitlin is polling
Golemics space will not expand beyond carpet
finishing kitchen : stair? glass?
enclose printer in old machine room or Marey's old room
Caity as librarian ē Sue + Peter? or Sue as librarian?
Brian → estimates for partitions 6 slies/offices on old balcony
Jude/Caitlin/Ken Caitlin will fix mtg time.

④ agenda for next week
<planning the planning>
marathon mtg's usefulness ±
Break : 5:30? → 7:30?

skandas
heaps / categories

Rossman: gang of 3? rabble rousing rhetoric?
one mtg focus on organization + process (Sue Bloch) first mtg should.
M Moore : mgmt questions :
PS/CM relations
hardware
tech people (~ non-tech relations + scheduling)

Carol : bringing in new people ē clear understanding of what/how/why
(personnel/mgmt/time line for pilot system)

Sandy : PS personnel reintegration or unbridgable chasm?
phone-in access from private computers
journal & propaganda

TO: CMers

FROM: Tom, et al

RE: OUTSTANDING THINGS TO BE DONE -- NON-TECHNICAL

NOTE: RANDOM ORDERING

1) As I understand the situation, we don't need any more programmers to work on the first cut of the C.M. front end. That is, excluding Jonathin Ryshpan, who Tom is scheduled to call soon about the upgrade of the window package and the conversion of Sequitur to work with Provos in a networked environment. Does everyone agree with this?

2) Tom has submitted a request for overtime pay for the pre-Comdex crunch. Clarify the overtime pay situation enough to make a decision on this and related issues. How do we know that work for which pay (especially overtime pay) is requested is work that the group actually wished to have done?

3) As a related issue, do we want to stay with the absolutely subjective pay policy we are on at present? This policy is, as I understand it, that each worker reports their hours weekly and that's that. Is this still working out?

4) OUTSTANDING, PROGRAMMING RELATED ISSUES BETWEEN PACIFIC AND C.M.

Assume plenty of programmers working on the C.M. system sofware. Furthur assume that C.M., as an organization, recognizes it's interests in maintaining the marketability of it's code. Still, there are several major classes of confusion engendered by the degree of organizational interpenetration.

What belongs to C.M. and what belongs to Pacific? At the moment all code belongs to C.M., but this will change. At some point there will be an interface to the nucleus and toolkit which is concrete enough to allow autonomous development groups to develop applications. Obviously, when that happens, ownership of new code will be a clearout issue. Whoever writes it will own it. In the meantime we have a case where C.M. owns code being extended by Pacific employees and C.M. employees are heavily mortgaged to market forces. What gives? Is C.M. extricating itself? Is Pacific happy paying for code it doesn't own? Is it prehaps willing to pay to have such work done just to ensure that its' priorities are respected by C.M? Is C.M. happy with the current arrangement, or would it prefer to develop an internal division structure, with its' own members and employees maintaining and extending the code it owns?
.pa

Is seems like it might be best to separate out the different cases. One possibility is to distinguish the following:

> 1) C.M. members or employees working on code owned by C.M. There are, of course, resource alloaction problems for C.M., but if those are solved and people are doing what they want to do, then all is cool here.

2) Pacific employees working on Pacific's work. Again, there are no problems.

3) C.M. members or employees providing technical and sales support to Pacific. For example, porting X.dot and Sequitur to new machines, helping with customer support or managing Pacific employees. It seem that here the best solution would be for C.M. to bill Pacific, at rates comprable to what Pacific is paying for similar services, and then to pay its' own members and employees. But this is illegal, so equitibility seems impossible. Obviously, this class of labor should be minimized, and eliminated in the long term.

4) Pacific employees working on code which will be owned by C.M. At the moment our situation seems to be one in which Pacific is barterin this kind of work for the work in catagory three, above. This is to vauge in the long term. Probably this sort of thing should be minimized, and when it exists it should be handled by having C.M pay Pacific $10/hour for the labor, and having Pacific pay its' employees whatever it wishes to.

Anyways, assuming that these kind of questions are answered, there still remain other kinds of questions which should be cleared up. What is, for example, Pacific's recourse if it has a disagreement with C.M. about the relative priority of a task? Obviously, if it is paying the salaries of a programmer, then it should be able to allocate the time of said individual. But there is a managerial/technical overhead for C.M., and it might cause a serious conflict. Right?

A related issue has to do with the plans for where Pacific programmers wil work. If they are here it will be far easier, indeed it is virtually impossible to put the ones who work on the C.M. code elsewhere. The other are a different story.

5) Get copies of Byte, Inforworld, for the office. Let's please decide what we want around here and get it over with. Is there any work we want done with the literature around here? I seem to remember Caitlin volunteering to take care of it if she was asked to.

6) Isn't it true that we want the Pacific board seat to be held by the president of C.M., and not by Ken as an individual humanoid? Carl was going to check with Susan Clair.

7) The Personnel policies and proceedures need to be finished. There are variety of unresolved questions having to do with personnel, but most of those have to do with either membership issues or relations with Pacific. These aren't relevent to the PP+P and shouldn't interfere with their completion and adoption. There is, however, the outstanding question of job security. Since we on this side of the pale make so many of our personal decisions based on our ability to get work done here that we consider worthwhile, what happens if we get forced out or decide, on our own, to quit? What rights do we have? How do we distinquish these cases?

8) We must get the stock disbursed soon. AND we must have copies of the list of money and time owed to people. We nee a formal policy for how people are paid back relative to other people -- and relative to other expenses. How much has built up (on the C.M. side) since the great split?

As for the money owed from prior to that split, who owes what?

9) LONG TERM MONEY DEAL WITH LEE.

10) Any outstanding confusion with ISC?

11) Get financial plan going on multi-plan for C.M. organization. The plan should be divided neatly into pilot and non-pilot (ongoing organizational) expenses. It should, furthermore, be structured so as to allow one to separate costs related to supporting Sequitur and X-dot from costs related to C.M. itself. It should deal with income from both Lee and Pacific, and assume a much higher degree of clarification vis a vis both of these sources of revenue.

In the Pacific case this means a better royalty schedule, and in the case of Lee it means a review of his plan for separating his cash from Osborne, the setting up of the organizational structures necessary to get it to C.M., and a written agreement about the rates and amounts that CM will get from Lee, how, and when. It also assumes an estimate of the physical cost of the first pilot, and of hardware development for it.

12) Hardware development for the C.M. terminal.

13) Pilot budget development.

14) Critical path and general planning.

15) Problems with making decisions and organizational reworking. Meetings, committees, etc.

16) Finish off licence aggreement with Pacific:
    1) Military sales policy.
    2) Royalty Schedule?
    3) non-competition clause
    4) Who does what, when, for how much?
    5) ?????

17) Is there any business related to the limited partnership which is in a flakier state than is really healthy?

18) Development of membership criteria. Is there anything to be done or did we table this until Efrem's return? We had, for the record, come up with 4 different criteria: 1) Activity, 2) Interpersonal compatibility, 3) Political Goals, 4) The completion of a probationary period.

19) What work needs to be done on the by-laws?

20) Who will be liason to Mark Szap and Peter Krebs? Huh?

21) What about hardware acquisition. Long VAX lead time.

23) Any more to be done on the Parker Street upgrade? What is needed to finish off the kitchen? The new office spaces? Once again, can we use the big space any better? How about safe railings everywhere?

Can we divide the upstairs balcony into real offices (i.e., with doors to

Rossman: power / short-term goal / assigning tasks
Sue: time line / + how + who / process of decision-making
Tom: time line (dovetailing: advance planning) / clarification: $ PS personnel relations / $ tying together ?
CM: PS
CM: LS
Marcy: process discussion / struct of CM: responsibility assignments, PS relations, goal, pilot project, power (decisions $$, membership)
Jude: first node
liaison + myth-building for CM

Peter: 1st node

Lee: future CM, then what builds this? tech / organizational / myth-building
changing ourselves + environment
a month of mtgs

~~[illegible]~~
~~[illegible]~~
Sue: hard part first: what is CM? power? membership?
Sue facilitates
after dinner: dividing tasks

| = = = | on screen

buildspill in printval will ~~lose~~
not key-text created?
flag for printmode?

$ x 100 consistency?

November 30, 1982
Page 1

To: Community Memory

From: Tom

Re: Money

Look, I don't want to complain, but I feel that our current understandings and arrangements about pay for extra-ordinary efforts are insufficent to deal fairly with the current, very complex, situation.

In the two months before COMDEX I worked 169 hours overtime. It wasn't authorized, of course, but it was, I believe, real work that was done in the real interests of the group.

Now I could be wrong, but as I recall the discussions about overtime that we had in the past, they were heavily flavored by the problem of "proper authorization." That is to say, there was some feeling that, were we to adopt a pay policy that would enable individuals to be payed for more than 40 hours a week, claims would be tendered for work that the group did not and would not have chosen to pay.

I don't have a long term solution to this problem at the moment, but I do feel that certain classes of work are clearly not as problem ridden as others. Specifically, I think that there are large and well delimited bodies of programming and support work related to code that, while owned by the Community Memory project, is oriented towards the market as much as or more than it is oriented towards the project. In this catagory I would put X-dot ports and marketing support and Sequitur crunches like the one that just passed.

I think the difficulties that we have in "managing" the allocation of financial resources to work of this kind of should not be allowed to create a situation in which people are expected to do it without pay. Specifically, I would like to get paid for that 169 hours I mentioned earlier. I would really like to get paid overtime for it, and I honestly believe that we can and should have an ovetime policy that distinguishes between work that the group wishes to have done (and which really does require overtime in order to do, and work undertaken because one or two people think it "must" be done.

Of the 169 hours overtime that I myself have recently worked, 40 hours of it was worked during weeks in which I worked more than 60 hours. If we were to accept the IBM port as work that should properly have been allocated overtime, but choose to hold to the view that no overtime should ever be paid for work over 60 hours a week (and my experience in the last month leads me to believe that this is probably a good policy), then the number of hours for which I should properly be owed overtime becomes a mere 129.

I make these statements knowing full well that there are others, both Pacific and C.M. employees, who worked overtime in the month or so before COMDEX. Since I've already been told, on a number of occations, that C.M. employees can properly have no say over the modes of renumeration proper to Pacific, I will say nothing more about the Pacific employees. Other C.M. employees that worked overtime for the COMDEX crunch, and Phillip -- when he is forced by the wieght of Pacific's dependence on him to work weekends - should, in my mind, be paid overtime.

P.S. --- At the very least, I think that people who work more than 40 hours in a week of this kind of work should be paid for every hour that they work. The alternative to this is comp time, which, if it were ever to be taken, would probably not be in the best interests of the organization. My real feeling, though, is that work like the IBM-port crunch is properly overtime work.

Organization and spliting -

The original CM group did not make decisions by consensus, in fact watching the process of consensus made us anticonsensus. We said we made decisions by *agreement* but never atriculated what that ment. The way we behaved was simple, we just made decisions, ones which we thought everyone would be reasonably happy with.

It was definitly a *small* group process, but it worked wonderfully fewer nit picking meetings, less competition, no politics (in the evil sense).

Our current process is a dysfunctional monster. Frequently there is the temptation to blame it on a few loud mouths, Remove Tom, Miller, Lee & the from a meeting and the reports are still grisley. I've heard it claimed that there are better large group processes and I've experience better, but *not* in a governance situation.

So I want to formalize decision making by *agreement* and propose organizing by *collaborative* rather than collectives. I suspect this model is not far from the current affinity group method.

Unity + Design Process.

SCENARIO 5: A MAXIMAL CM SYSTEM

Michael Rossman -- 1 Mar 83

Consider this minimal projection for the public front: In 5 years the basic 64K-plus-modem unit will sell for $200, and 10 million sets will be in homes containing 30 million people. Within 10 years 90% of American homes will have such a basic household appliance.

There's no way to stop this drift, or to avoid its implications. If CM itself is not remotely-accessible, almost all of the kinds of information it (would) handle will become remotely-accessible anyway, through the growth of commercial and other services whose type models at present are the Source, EIES, Teleidon, and EBBs. The nature of the material presently carried by these prototypes already spans almost all the information-space CM is envisioned to handle.

The market dynamic appears natural and inexorable. People will pay for any data they need. The only question is: what forms of commercialization of each particular database will be made possible by what they're willing to pay? It's easy to foresee developments through which the mass markets for the most readily "exploitable" databases (car sales, entertainment listings, news, etc.) are locked in early by commercial services; and the others left to more specialized or less-commercial development on (for a time, at least) a piecemeal basis.

The result will be to duplicate the content of CM's "coverage" but to reproduce its social baracter only patchily at best, with different databases being accessed through different remote services and governed in a variety of ways, some fully-CM-like but most quite antithetical.

What then will be the function and fate of a CM that doesn't offer remote access? Its only unique database will be precisely the left-overs, whatever can't be exploited commercially or developed by do-gooders for remote-access. Its non-unique database will attract users and support only insofar as the service offered is economically competitive with remote-access services. Prospects for this seem quite dim. Since local-call remote-access services are intrinsically cheaper to run (being spared the expense of maintaining public terminals and sites) and significantly more convenient to use, they can exploit a considerable profit margin before pricing themselves high enough to make users prefer a direct-access CM for the same kind of database.

Nor can we expect the ecumenical and comprehensive character of CM's potential public database to attract users away from a Balkanized array of remote-access services, each with its own interface and use-fees. For one major thrust developing now

involves the amalgamation of diverse services; and the early forms of the Source and Compuserve already suggest that it will dominate this domain.

All this suggests that a direct-access public CM system will have limited means and options in a context of well-developed remote-access systems. It may be able to survive as a unique conduit of specialized data not accessible remotely, supporting itself also by cheaper rates for some remotely-accessible data. So long as subscription and use fees put remote services out of reach of much of the population, a drop-in public CM system might even thrive on their patronage. But just as the receiving hardware will penetrate almost all homes as an ordinary basic appliance, so these remote-access services will follow, organizing and pricing themselves to enroll almost all homes as subscribers. The analogous progress of cable TV is a poor guide, since the communication lines are already in place here. By 1993, 80% of Americans will use remote-access general data services regularly. Such a CM system could still provide a vital service to the remainder; but its role in informing the largeer information economy would remain marginal.

There remains the possibility that a direct-access CM system could inspire such allegiance, among a subculture valuing its political character, that people would renounce the convenience and economy of remote systems to patronize it for their basic (non-personal) information interchange needs. I think this possibility is remote indeed, even on its own merits.

Moreover, this system would have competition of its own kind. For if a direct-access CM system can work, then so can a remote-acwess one, so long as the publc does have the access. And the presumptive success of our prototype and its spread will lead do-gooders and even commercial enterprises to license the software, or to recreate its equivalent, and create remote-access CMs. The only distinctive virtue our direct-access system would retain would be the homey conviviality around the terminal in the record-store or supermarket -- i.e. about as much interaction as one gets around the phonebooth in such places, once the system takes its place as an ordinary utility.

[A Disturbing Scenario]

In sum, this line of reasoning concludes that in the not-very-long run a CM system determined to run only by direct access will be outflanked and rendered marginal by remote services, probably but not necessarily commercial.

It is a conclusion we should ponder seriously, before we deploy our first CM in the field, because we are likely to be thrown seriously off-balance in our judgements by the very successes of our first field trials.

For all that we hope will happen in them will happen, at least in the short run. The databanks will swell and pulse with useful, interesting, and vital information. Users will flock to the terminals as word spreads. The several dozen public sites where the terminals are placed will throb with new currents of vitality as users of different races and classes and interests pick up on each other in the democratic space of the open terminal, stimulating new connections, new focii of mutual cooperation and social effort. And so on.

From all of this, we are likely to draw not only certain technical and social lessons about the patterns of intercourse mediated through the electronic system itself, but also a broader conclusion -- that the vitalization of the sites and the whole buzz of awakened community around the effort depends organically upon the emplacement of terminals in a direct-access system. And indeed this will be true, for the moment and a while after, partly (and usefully) because of the "novelty" effect, the "Hawthorne" effect, media attention, and other such factors whose influences will fade after a while.

The whole experience of the prototype trials will be much richer and appealing than the dry lesson at its core, about a character of information-exchange quite independent of the means used to access it. The experience will reinforce the feelings we have, about bringing people into physical contact as a way of counteracting the depersonalizing character of electronically-mediated contact. We'll relish each use we see people of the underclass making, and each cross-class contact; and observe that these wouldn't be occuring if there weren't public terminals. And we'll determine, as far as we can, to make sure that these valuable things happen again in every extention or franchising of CM that we make.

All this would be dandy if there were no competition, if the Moving Cursor of Fate weren't already tracing the future on the screen. But look at that conclusion again: "...outflanked and marginal..." Then consider how those scenario values that depend on public-site emplacement will fare in 1993: Who will still lack remote access to what? Who will go to the terminal, rather than dial from home? What kinds and intensities are then to be expected around (rather than through) terminals grown long-familiar? And what kind of mistake will we be making, to aim for this?

I'm trying to spell it all out here because what's at stake is deeper even than "...outflanked and marginal" conveys. For our goal isn't simply to make a viable CM system in the short run, or even the long. It's to have a significant effect on the culture, politics, etc. of information exchange. And these lines of reasoning suggest that we're likely to blow the chance if we don't extend CM to remote-access as soon as we can. Though I value the many virtues of an emplaced-terminal system as much as anyone does, I think it will be a tragedy if they lead us away from pursuing CM's remote extention actively and immediately.

I'm not arguing against having public terminals in the first or subsequent CM systems. There are many more reasons to have them than noted above, including their functions in myth-making and early publicity. But I think that we need also to explore full remote service quite as vigorously, splitting our resources and coordinating the two wings of CM, else we will lose the Jump.

We're at a fortunate stage in the process, one that won't last for long. Relatively few people have home systems with modems yet, probably not more than 25,000 in the Bay Area. If we deploy a direct-and-remote CM system this year, of modest size in both wings, what we will see as managers will be the filling of both wings to capacity use, with the remote-access wing perhaps filling first. But the direct-access public-terminal wing will be much more prominent in the public eye, since its roughly-equal traffic will be on display rather than privatized, and it will determine the character of the CM myth (which will then extend to the remote wing of the system -- and justly, for the principles governing both wings are the same.)

As for the Jump, I don't know how to describe it, but we all know it's real, a decisive and massive phenomenon. Apple and CP/M got some Jump, and even Osborne got a bit of it; if IBM plows them all under it'll be because IBM got the bigger Jump first. The Jump has something to do with packaging a system and establishing a myth and gearing a sufficient critical mass of users in to these; and its effect is to establish hegemony in colonizing a territory. The Jump has applied to all levels of this technology's development so far, and is even more relevant as commercial public information services develop.

The Source and Compuserve are striving to get the Jump in the modem-access market, while dozens of corporate giants are reaching for it with pilot videotext programs. We are encapsulated in our isolation: CM must be understood as being just one of many public information systems in a chaotic context of competitive development now. We are looking to get the Jump on public-terminal systems, and may indeed; but it's clear that this will be only a minor byway of the action in the telecommunicative information economy.

It seems more important, if less bucolic, to try to get the Jump where the main action is. Either way, in direct or remote-access modes, CM will be competing against the other contending service-providers for allegiance and support, and won't prosper unless it can deliver more of what people want for the money and effort it costs them. So what we're trying for is indeed to get a Jump in the ordinary terms of the commercial field. But also we're trying to get a much deeper and subtler kind of Jump -- not simply to capture mass user allegiance for one system of hardware/software, in preference to other systems essentially equivalant, but to capture it for one system of social

information relations, in preference to another dominant system rapidly colonizing this domain.

For the moment, the field still appears open. Compuserve and The Source have not yet reached 60,000 subscribers each; and none of the interactive videotext trials here have been even this large so far. It seems possible to develop a remote-access CM system of competitive size, presenting a significantly-different model of information relations and significantly influencing further developments in the remote/home information field. But whatever chance we have to get this Jump may be fading rapidly, as The Source and its like extend their patronage by giving out free introductory subscriptions with every modem sold, and make more comprehensive the varieties of data and service that they offer.

They may have enough Jump already for their relational hegemony to be already unchallengeable. I don't know. But I'm pretty sure that any future attempt to challenge it by a remote-access system based in CM principles will have less chance of success than we have at this earlier stage.

[Concrete Proposals]

(a) Establish fully-public remote lines to complement public terminals in the first field test. This will be inadvisable if it reduces the number of public terminals below some critical minimum, which I estimate as 20-30. Therefore I think that the field test should involve at least 40 terminals and connection of the two nodes supporting them, with 8-10 lines dedicated to general remote-access. [It's important that the public terminals and remote lines share the same database.] There are various ways possible to charge remote users, but this need not be settled or done until later. I'd be quite happy to see this remote component's implementation delayed for a few months, until the sited system is up and running well. But to delay it further or postpone it till the second or nth system is fielded is to kiss off more Jump than we may have.

(b) Move on quickly to develop another CM system centered around remote access. It might have some direct-access terminals, as in my Scenario 2 ("computer community memory"); and perhaps should have some, for ideological consistency. But its focus should be on the remote-access domain and its thrust should be entrepreneurial and aggressively agglomerative. Briefly put, the job of this remote CM (RCM) is to gobble up every free remote-access database/service available, plus as many of the cheaper commercial ones as it can afford, attempting as rapidly as possible to organize as wide a range of transactions/interactions as possible, in a system of purely democratic character.

In Scenario 2 I've imagined this system as dedicated to data of interest to computer-users as such; here I suggest a much

broader version. But the computer-field core is still essential for the practical reasons sketched there: that its data is most accessible (in hardware and in social terms both), and that it's the natural home base and publicity agent for the powers and character of CM systems. Indeed, the microcomputers now flooding the consumer market bear a legacy still from their homebrew roots that's critically different from the legacy of the telephone or TV (though not from ham radio's.) Cooperative, information-sharing users' groups play major roles in the action, more prominently than such groups do with any other technology in our culture now. This quality alone, independent of their computer familiarity, makes them prime natural candidates to welcome, host, and aid CM systems and the culture/politics these represent.

The simple, structural fact is that there are by now hundreds of non-commercial (or minimally-commercial) projects under way using computers to make various databases and exchange-powers publicly available through direct and remote access. Most of these ventures have small user networks and tiny organizing cores; many are informal; few are actively (on-line) interconnected. The terrain of social transactions they span is indeed minutely Balkanized -- but its span is considerable and its traffic already substantial. Almost every one of these projects proceeds in a spirit somewhat kindred, within its limited domain and aims, to the spirit of CM. Most have at their core people who've been touched by the cooperative spirit descended from homebrew days. It seems, in short, to be a scattered field ripe for organizing and hospitable to this.

The terms in which we have so far thought of organizing the emplacement of a CM system have been conditioned by the image of a public-terminal system. This has focussed us on the questions of site, of database seeding, and of gatekeepers (as much in their on-site character as their remote); and secondarily on the problem of finding social organizers within the using community to help emplace the terminals there. If we think instead of a remote-access system, the terms of organizing emplacement change. "Where do we put it?" gives way to "how do we publicize it?" "How do we (get someone to) seed it?" gives way to "how do we channel in to it as much as possible, on an ongoing basis, of the remotely-accessible data being gathered and organized by other sources?"

And the searches for organizers and gatekeepers become reconfigured too, amounting to this: how can the scattered people who already tend the remote-access public infosphere be invited and organized to tend and extend their domains through a collective system with this tool CM? If ways can be found, I imagine the collective mass of the enterprise would be considerable (rivaling any commercial competitor, if it's done within the next year or two); and its spirit might, with the aid of this "capitalization", be strong enough to prevail in the long run.

HEIRARCHIES OF SYSTEM POWERS (USER-CENTERED)

I. RECEIVING INFORMATION

A. BROADCAST INFORMATION:
   1. Receive involuntarily.....
   2. Receive voluntarily
      a. at random.....
      b. selectively.....
   Axis: (i) one receiver-class.....
         (ii) many classes defined:
              (aa) by broadcaster only.....
              (bb) by receiver's technology.....
              (cc) by receiver's choice.....

B. STORED INFORMATION:
   1. Primary data, restricted by:
      a. user's class:
        (i) involuntary.....
        (ii) voluntary.....
      *. " technology.....
      *. " finances.....
      d. " knowledge, available:
        (i) not through system.....
        (ii) indirectly " " .....
        (iii) directly " " .....
        Axis: degree of knowledge available
   2. Full access to primary data.....
   3. Restricted access to secondary data
      *. technical data:
        (i) descriptive.....
        (ii) analytic.....
      *. social data:
        (i) system proper.....
        (ii) system use:
          (aa) statistical data.....
          (bb) transaction data.....
      Axis: range-of-access as in B.1.
   4. Full access to secondary data.....
   Axis: degree of specificity of search-power

C. TIGHTCAST INFORMATION (USER-TO-USER):
   1. Receive all sent.....
   2. Select among what's sent.....
      [axis: coarse to fine specificity]
   3. Receive from similtaneous sources.....
   Axis: (a) receive after storage.....
         (b) receive in real-time.....
   [Axis B.1.*-*-d. applies here also.]

Axis: read-only or record

II. ORIGINATING INFORMATION:

A. UNABLE.....
B. TO SYSTEM MANAGERS:
[*. Indirectly]
*. Through system:
(a) involuntarily.....
(b) voluntarily.....
C. TO USERS INDIRECTLY:
1. At managers' pleasure.....
2. Automatically.....
D. TO USERS PASSIVELY THROUGH STORAGE:
1. Access restricted [range as in I.B.1.].....
2. Accessible to all.....
Axis: from vague to specific "identifiability"
Axis: (a) no control over persistence/editing.....
(*) control over persistence.....
(*) " " editing by others.....
(**) editing power.....
E. TO USERS ACTIVELY ADDRESSED:
1. To system-defined classes.....
*. To self-defined classes/groups.....
*. To specific individuals.....
Axis: (a) through storage only.....
(b) real-time capability.....

III. STORING INFORMATION

A. UNABLE TO STORE.....
B. ABLE TO STORE, accessible to:
1. all users.....
2. restricted user-classes.....
*. system managers only.....
*. specified users only.....
5. originator only.....
Axis: amount of data storable
Axis: permanence of storage

IV. WORKING WITH INFORMATION

A. IDENTIFICATION CAPABILITIES:
* for data-origination (storage)
* for data-search
B. INPUT-EDITING CAPABILITIES
C. DATA-PROCESSING CAPABILITIES:
* within accessed entries.....
* among stored entries.....
[* within stored entries]
D. HOUSEKEEPING AND CONTROL CAPABILITIES:
[* monitoring powers]
* control capabilities.....
Axis: sophistication of system software
Axis: graded by user's equipment-power

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  [* monitoring powers]
  * control capabilities.....
Axis: sophistication of system software
Axis: graded by user's equipment-power

(1) – Momentum won't do –

(2) – What other machines shall we look at today? (assuming that a competent 68080 is at all relevant)

(3) – Micros don't help C.M. (except w/ VI editi

(4) – Smart terminals help as much as micros

(5) – Social/Economic implication of Micros

(6) – Is Mark's machine still financially real?

(7) – Summary of meetings:
- Mark, Jerry, Ward, Michael, Carl
- Tues w/ Bernal heights

(8) - who is in charge? / who is doing C.M.?

(9a) CAN CMSS bring up a CM program?

(9b) " " " " " " NODE?

(10) – CAN A 68000 UNIX machine be a C.M. node? Would another disk help? Would another operating system (E.g. PROVOS) help?

(11) – What are the relations between CMSS and CMFN?
E.g. Does FN get Sequitur sources
C.M.
PROVOS
X.DOT

✓ – Usenet & Envoy100

Armstrong's Fluke.
Osborne's Coin Customs broker.

(1) Disk SERVER (2) TERMINAL Handler

(3) FIND (4) BROWSE (5) ADD

(6) COMMAND PROCESSOR (7) WINDOW EDITOR (8) SCREEN + "mouse" handler

1-5 MUST be in node machine

6, 8 MAY be in either node machine OR MICRO

(7) - if VI style insert is required,
(7) requires either a micro OR a smart terminal.
- if VCSD style insert suffices,
(7) MAY be in node machine

subject to above, there is little advantage to moving 6-8 into micros, since they are not computationally intensive.

PROPOSALS FOR SOCIAL STUDIES

The Community Memory concept, and the experiences which most directly gave birth to it -- Resource One and the Community Memory pilot in 1973-4 -- are now about ten years old. Both technically and socially, the situation has changed considerably during that period. But while the technical specifications for the Community Memory system have been continuously refined and updated, the social design has remained about the same.

I. Proposal for a study of responses to the CM system at Fort Mason.

A new CM pilot, to be put up as soon as possible at Fort Mason, will give us a lot of feedback for the refinement and elaboration of our future plans. It will no doubt reveal both strengths and weaknesses of the social as well as technical design. I propose that we pay very careful attention to eliciting and collecting this feedback. Here are some suggestions:

1. All the media (brochures, meetings, etc.) that we use to explain CM should clearly state our intentions: that this is a pilot project and that the participation of users in the definition and redefinition of the project is desired.

2. Our study should be developmental: the materials that introduce CM to its potential users at Fort Mason should elicit feedback about attitudes, expectations, fears. These responses should be compared to later feedback.

3. There must be several ways of talking to people about their responses to the system: on-line questionnaires, a strong presence of CM staff at the Fort Mason site, meetings, perhaps even a survey of all occupants of Fort Mason.

II. Proposal for a study of the context into which we are putting CM.

While the Fort Mason CM is up, running, and collecting reactions, we should do a thorough study of the social context into which the CM system will be put. I believe that the availability of a large amount of money from Lee makes this even more crucial than ever: If we had only enough money for a single pilot, we would have to depend on the system to fly or flop on the basis of support from users. We don't want to fall into the trap of throwing more and more money at a system that doesn't get support because it's not what people want or need or because its social design is a little off.

Some of the questions this study should answer are:

1. What other "community computing" or "alternative computing" projects are there? What are they doing, what is their philosophy, what resources do they have, what pitfalls have they stumbled upon or into? How will CM overlap with their functions, is there some mutually beneifical way in which CM can work with them?

2. What is the state of the commercial information utilities? How close are they to being real? What kind of growth do they project? Which of their functions will CM duplicate, what will be unique to CM? What kind of public response do they expect? How do we define ourselves in relation to them?

3. What are the plans and expectations of existing community and political groups vis-a-vis computers? Do they really want only mailing lists, or are they interested in communications as well? What computer resources (hardware/software and human expertise) do they have and want? What cooperation or interference could CM expect from them?

4. What are the financial projections for CM? How much staff is needed short-term and medium-term? Will it ever be self-supporting? How much money is required for the desired rate of growth? What is that rate? What other moneys (from users, foundations, associations of community groups) can be expected? In short, CM needs financial planning every bit as much as does Pacific.

Some resources and suggestions for this study:

Information and Communication Technology for the Community by Steve Johnson. (Marcy has two copies.) This includes a listing of various projects. At least some should be contacted.

The MIST manual. A copy is floating around the office. MIST has been used at RAIN and for several conferences. We should find out about these experiences.

Ken and Efrem should write up their report on the Videotex conference. More research on Videotex and other information utilties should be done.

Andrew Clement and Margaret Benston are preparing a paper for the Canadian government. Obviously they have thought about the problems CM will face and should be consulted.

Of course, we should monitor the experience of Kingfisher.

Tim Haight at the University of Wisconsin in Madison is doing a study of community computing. We should consult him, perhaps on a formalized basis.

We should contact others who have thought about community information utilities: e.g., Laurence Press ("Arguments for a Moratorium on the Construction of a Community Information Utility", December 1974), Yoneiji Masuda.

The Peacenet experience should be closely monitored.

Nobody wants Community Memory to be a mailing list or service bureau. But this fear, which I share, seems to foster an attitude which shortchanges or ignores the importance of getting existing community and political groups involved in Community Memory. Another fear which must be taken seriously is that without the involvement of the already-active people, Community Memory will never become more than an electronic Flea Market.

We should try to imagine scenarios that get already existing groups with whom we feel sympathetic everything they need and want.

There are three functions that these groups would probably find appealing:

1. Office tasks.

2. Networking between groups (e.g., a network of health care activists, or of disarmament groups).

3. A public access computer system (i.e., Community Memory). Most if not all of the groups I'm talking about would be very interested in and committed to a democratizing communications tool.

Why is the involvement of these groups important?

We are not putting the Community Memory system into a social vacuum. The scene which we hope to affect is a large one, but we can't do it alone. We must have the active support and participation of the people whose ideas and world views are closest to ours. These people tend to be already involved in "social change" activities. We should think of Community Memory -- as a communications tool -- as supporting their work and helping them involve other people.

Some groups are already thinking about computers as communications and networking tools. Peacenet, for example, sees this as a crucial part of its purpose.

These groups have the resources that no money can buy: the energy of their organizers, the active interest of their members, pre-existing networks of communcations (word of mouth, newsletters) that can be augmented and complemented by Community Memory.

The interest in computers and the people that would be involved in computers as office tools will very likely overlap with those involved in computers as communications

tools. We can use this overlap to our advantage, or ignore it and alienate many people.

What if we don't involve these groups?

I am afraid that without the participation of these people, the Community Memory database will remain largely trivial. The most meaningful content is likely to come from people already involved in social change activities. Of course, we hope that Community Memory will provide an entree for many others, too. But it would be easy for Community Memory to get stuch as an electronic "Classified Flea" or a computerized personals page. These functions are OK by me, but far from enough.

In addition, if we truly want Community Memory to belong to the people who use it, we need the organizational prowess of these groups and their constituents. Otherwise we will in fact become a "service bureau" -- a different sort than the one of the Resource One nightmare, but a service bureau nonetheless.

Some preliminary ruminations: How can the three functions (office tasks, networking between groups, public access) fit together. Is it possible or desireable to do it all on the same system? For example, require that any group that wants to do [redacted] on Community Memory also have a public terminal? PRIVATE CONFRENCING

Office tasks and group networking could both be accomplished with microcomputers. But the conferencing software available for microcompters (e.g., Communitree) is still pretty inflexible. And this scenario shuts out "the public" from access to what may be very intersting databases.

Group networking and public access also "fit together" logically, and perhaps could both be provided for by a Community Memory system. But groups will want some way to have private conversations and information exchange. Would Community Memory be willing to provide this?

NOTICE OF
COMMUNITY MEMORY PROJECT MEMBERSHIP MEETINGS

There will be a meeting of the membership of the Community Memory Project at

7:00 p.m. on Tuesday, January 3, 1983
at 916 Parker Street, Berkeley.

The agenda will include the following items. Additional items can be added at the meeting.

-Introduction and discussion of ammendments to the resolution which proposes to ammend the Bylaws thereby creating the new category, "Associate Membership."
A copy of the resolution is enclosed for those members who were not present at the December 13 meeting.

****

There will be a meeting of the membership of the Community Memory Project at

7:00 p.m. on Tuesday, January 31, 1983
at 916 Parker Street, Berkeley.

The agenda will include the following items. Additional items can be added at the meeting.

Vote on resolution to ammend the Bylaws thereby creating the new category, Associate Membership.

cc: Members: Philip Morton, Efrem Lipkin, Jude Milhon, Ken Colstad, Lee Felsenstein, Sandy Emerson, Tom Athanasiou, Marcy Darnovsky, Carl Farrington, Sue Bloch.

NOTICE OF
COMMUNITY MEMORY PROJECT MEMBERSHIP MEETING

There will be a meeting of the membership of the Community Memory Project at:

7:00 p.m. on Tuesday, February 12, 1985
at 916 Parker St., Berkeley, CA

The agenda will include the following items. Additional items can be added at the meeting.

-Membership policy
-East Bay Community Memory Coop

cc: Members: Tom Athanasiou, Terre Beynart, Sue Bloch, Ken Colstad, Marcy Darnovsky, Sandy Emerson, Carl Farrington, Lee Felsenstein, Phil Kohn, Efrem Lipkin, Jude Milhon, Philip Morton, Karen Paulsell.

BYLAWS

of
THE COMMUNITY MEMORY PROJECT

ARTICLE I

Principal Office:

The principal office for the transaction of the business of the corporation shall be located in the County of Alameda. The Board of Directors may at any time or from time to time change the location of the principal office from one location to another within the County.

ARTICLE II

Membership:

Section 1: MEMBERS. Membership in The Community Memory Project is open to all persons without regard to sex, age, economic class, race, physical handicap, or to political, social, religious, or sexual preference. Members must be willing and able to perform the obligations of membership.

Section 2: OBLIGATIONS OF MEMBERS. The members of this corporation must actively work to develop the Community Memory system and otherwise to further the goals of the corporation as set forth in the Articles of Incorporation. Members must devote a substantia' part of their time to the project.

Section 3: ELECTION OF MEMBERS. It is the policy of the corporation that, whenever possible, employees and volunteers shall be members of the corporation. Any person who has worked for the Community Memory Project as an employee or volunteer for a period of six months shall be eligible to become a member. New members shall be elected by a majority vote of the members.

Section 4: TERMINATION OF MEMBERSHIP. Any member may resign from membership by notifying the Secretary of the Corporation in writing.

Any member who fails to perform the obligations of membership may be removed by a vote of the members. To take effect, a resolution to remove a member must be adopted by a vote of two thirds of all the members at each of two meetings of the members held at least one month apart.

Section 5: VOTING. Each member of this corporation shall be entitled to one vote.

Section 6: ANNUAL MEETING. The annual meeting of the members of this corporation shall be held on the third Tuesday of the month of November of each year at the principal office of the corporation, for the purpose of organization, election of officers and the transaction of such other business as may come before them.

Section 7: REGULAR MEETINGS. Regular meetings of the members shall be held at a time and place specified by a resolution of the members. The time and place of regular meetings shall be posted at all times at the principal office of the corporation.

Section 8: SPECIAL MEETINGS. Special meetings of the members may be called at any time for any purpose by the president, vice-president, or secretary, or by petition of any five members presented to the secretary. Written notice of all special meetings shall be delivered personally to each member, or mailed postage prepaid, at any Post Office in the County of Alameda, to the address shown in the records of the corporation. The notice shall be delivered or mailed at least fourteen days before the meeting.

Section 9: QUORUM. A quorum for any meeting of members shall be a simple majority of members.

Section 10: LIABILITIES OF MEMBERS. No person who now is, or who later becomes, a member of this corporation shall be personally liable to its creditors for any indebtedness or liability, and any and all creditors of this corporation shall look only to the assets of this corporation for payment.

Section 11: COMPENSATION OF MEMBERS. All members shall be entitled to compensation for work performed for the corporation. All compensation shall be on an equitable basis and in accordance with policies and procedures adopted by meetings of the members. In the event that adequate funds are not available to compensate members for work performed, members may voluntarily donate their work or defer compensation to a later time.

ARTICLE III

Use of Funds:

Section 1: NET INCOME. After compensation of members for work performed for the corporation, the net income of the corporation shall be used to further the specific and primary purposes of the corporation as set forth in the Articles of Incorporation.

Section 2: CONTROL BY MEMBERS. All expenditures under this Article shall be in accordance with policies and procedures adopted by meetings of the members.

ARTICLE IV

Directors:

Section 1: NUMBER. The Board of Directors shall consist of five (5) members of the corporation. This number may be changed at any time by amendment to the Bylaws of this corporation, as provided in Article VI of these Bylaws.

Section 2: QUORUM. A majority of the members of the Board of Directors shall constitute a quorum for the transaction of business.

Section 3: POWERS OF DIRECTORS. Subject to the approval of the members, and to the limitations of the Articles of Incorporation, other sections of these Bylaws, and California law, all routine business affairs of the corporation shall be handled by the Board of Directors. The Board of Directors shall have the following specific powers:

a) to conduct, manage, and control the affairs and business of the corporation, and to adopt rules and regulations not inconsistent with law, the Articles of Incorporation or these Bylaws.

b) to borrow money, and incur indebtedness for the purposes of the corporation, and for that purpose to cause to be executed and delivered, in the corporate name, promissory notes, bonds, deeds of trust, mortgages, pledges or other evidence of debt and securities.

c) to determine the expenditure of the net income of the corporation, in a manner consistent with policies and procedures adopted by the meetings of members as provided in Article III of these Bylaws.

Section 4: TERM. The members of the Board of Directors shall hold office for one year, or until their resignation or until they are removed, as provided in Section 11 of this article.

Section 5: VACANCIES. Vacancies in the Board of Directors shall be filled by election by a majority of the membership. A successor director so elected shall serve for the unexpired term of the predecessor.

Section 6: PLACE OF MEETING. Meetings of the Board of Directors shall be held at any place, within the County of Alameda, that has been designated by resolution of the Board of Directors. In the absence of this designation meetings shall be held at the principal office of the corporation. The place of meeting shall be made known to all members and posted at the principal office of the corporation.

Section 7: ORGANIZATION MEETING. Immediately following the annual membership meeting and election of officers, the Board of Directors shall hold a regular meeting for the purpose of organization and the transaction of other business. No notice of such organizational meeting need be given.

Section 8: OTHER REGULAR MEETINGS. Other regular meetings of the Board of Directors shall take place at a time specified by a resolution of the Board of Directors. No notice of such regular meetings need be given to Directors. The time of regular meetings shall be made known to all members and shall be posted at the principal office of the corporation.

Section 9: SPECIAL MEETINGS. Special meetings of the Board of Directors may be called for any purpose or purposes at any time by the president, vice-president, secretary, or by any two directors.

Written notice of the time of special meetings shall be delivered personally to each director or mailed postage prepaid, at any Post Office in the County of Alameda, to the address shown on the records of the corporation, or if not shown on the records of the corporation and not readily ascertainable, to the place where the meetings of the directors are regularly held. The notice shall be delivered or mailed at least fourteen days before the meeting.

Section 10: MEETING WITHOUT NOTICE. The transactions of any meeting of the Board of Directors, however held and noticed, shall be as valid as though had at a meeting held after regular call and notice, if a quorum is present or if either before or after the meeting each of the directors not present signs a written waiver of notice or a consent to hold the meeting or an approval of the minutes. All such waivers, consents or approvals shall be made a part of the minutes of the proceedings of the Board.

However, the members shall be notified of every meeting, however held and noticed, as provided in Section 15 of this Article.

Section 11: ACTION WITHOUT MEETING. Any action by the Board of Directors may be taken without a meeting if all members of the Board of Directors consent in writing, either individually or collectively, to this action. Such written consents shall be made a part of the minutes of the proceedings of the Board.

Section 12: REMOVAL. A director may be removed from office, with or without cause, by the vote of a majority of the membership.

Section 13: COMPENSATION. No director shall receive compensation for his services as director.

Section 14: OPEN MEETINGS. All meetings of the directors shall be open to all members of the corporation. The minutes of proceedings of the Board shall be available for inspection by any member.

Section 15: NOTICE TO MEMBERS. Notice of all meetings of the Board of Directors and of all actions without meetings shall be given to the members by posting in a prominent place at the principal office of the corporation promptly when the meeting is called or scheduled. All such notices shall remain posted for fourteen days after the meeting or action without meeting.

Section 16: EXECUTIVE COMMITTEE. The Board, at its discretion, may appoint an executive committee, which shall be composed of two or more directors, and delegate to this committee any of the Board's powers and authority in the management of the corporation's business and activities.

Section 16: CHAIRPERSON. The Board of Directors may at its discretion elect a chairperson, who shall preside at all meetings of the Board of Directors when present, and shall have such other powers and duties as may be prescribed by the Board of Directors.

ARTICLE V

Officers:

Section 1: OFFICERS. The officers of this corporation shall be a president, vice-president, secretary and treasurer, and such other officers as the membership may determine. One person may hold two or more offices, except that the offices of president and secretary may not be held by the same person. Officers other than the president and treasurer need not be members of the Board of Directors.

Section 2: PRESIDENT. Subject to the control of the Board of Directors, the president shall have general supervision, direction and control of the business and affairs of the corporation, shall preside at all meetings of the members and directors, and shall have such other powers and duties as may be prescribed by the Board of Directors.

Section 3: VICE-PRESIDENT. In the absence or disability of the president, the vice-president shall perform all the duties of the president and in so acting shall have all the powers of the president. The Vice-president shall have such other powers and perform other duties as may be prescribed by the Board of Directors.

Section 4: SECRETARY. The secretary shall keep a full and complete record of the proceedings of the Board of Directors, shall keep the seal of the corporation and affix it to such papers and instruments as may be required in the regular course of business, shall make service of such notices as may be necessary or proper, shall supervise the keeping of the records of the corporation, and shall discharge such other duties as may be prescribed by the Board of Directors.

Section 5: TREASURER. The treasurer shall receive and safely keep all funds of the corporation or deposit them in the bank or banks that may be designated by the Board of Directors. Those funds shall be paid out only on checks of the corporation signed by the treasurer, or by such other officers as may be designated by the Board of Directors as authorized to sign them. The treasurer shall have such other powers and duties as may be prescribed by the Board of Directors.

ARTICLE VI

Amendment of Bylaws:

These Bylaws may be amended or repealed and new Bylaws adopted by the vote of a majority of all the members of the corporation. A resolution to amend, repeal, or adopt Bylaws must be introduced at a meeting of the members and finally adopted at another meeting held at least one month later.

ARTICLE VII

Authorization to vote securities:

The president, or such other officer as the Board of Directors may select for that purpose, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all securities of any other corporation or corporations standing in the name of this corporation. The authority granted in this section to the officer to vote or represent this corporation arising from any voting securities held by this corporation in any other corporation or corporations may be exercised either by the officer in person or by any person authorized so to do by proxy or power of attorney duly executed by the officer.

Joaquin Miller
Vice President
Pacific Software Manufacturing Company
2608 Eighth Street
Berkeley, California 94710

Dear Joaquin:

This letter is to clarify and record the policies of The Community Memory Project regarding licensing of our software.

We expect to routinely approve all licenses except as follows:

1: Licenses which are to customers located in, or which permit shipment or reshipment to South Africa, Namibia, Botswana, Lesotho, Swaziland, or Afghanistan. Such licenses will not be approved.

2: Licenses which are to customers located in, or which permit shipment or reshipment to countries for which the laws of the United States require an export license. Such licenses will be approved only if they comply fully with the relevant laws. Licenses to customers located in and which restrict shipment or reshipment to countries for which a general export license is in force at the time of the license will be considered to comply with the laws.

3: Licenses which are to government agencies, or which permit sublicensing of a proprietary product. Such licenses must be considered on a case by case basis to further our policy of promoting the widest possible dissemination of knowledge. They will not be approved if they will result in a product which will not be available commercially.

These policies may be restated in a positive form. If the license prohibits shipment or reshipment to the countries mentioned in 1. and to the countries for which a general export license is not available at the time the license is issued:

A. We expect to routinely approve all user licenses other than to government agencies.

B. We expect to routinely approve all licenses which contemplate the sublicensing by your licensee of a commercial product.

C. User licenses to governmental agencies will be considered on a case by case basis.

In this letter I have used the words "commercial" and "proprietary" with their well established legal meanings.

I hope this makes our policies clear to you. If you have any questions, let me know.

Sincerely,

Efrem Lipkin
President

-etrem

CLIENT'S COPY

Proposed Sales Policy

I Clause for Contracts

Community Memory [and/or Pacific Software] reserves to itself, for all its software products and their deriratives (products made from them or incorperating some of their code), the <u>exclusive</u> right to sell these products to the military agencies of all governments.

The single exception to this exclusive reservation is a product <u>offered</u> for general commercial sale to non governmental agencies. such a product may be sold to anyone not on list X.

To offer for general commercial sale means to publically offer the product to all interested buyers. and explicitly excludes products ~~sold only to government agencies or~~ tailored to each user.

II

Pacific will attempt to avoid really objectionable sales - This will be enforced by CM reserving the possibility to veto 1 of every n large sales (n to be negotiated) by majority vote of its board.

Object of the Proposed Sales Policy.

1) Create a visible but not glaring opposition to the general negation of responsiblity for technical work.

2) Take a specific (and preferably comprehendable) stand.

3) Maintain a destinction between "commercial" and military applications not on the grounds of the greater "evilness" of the military vs the bankers, but on the grounds that the military and its tools serve a single ~~do~~ unacceptable purpose, but we frequently accept and use the results of "commercial" actions despite the nastiness of their sources such as the AT+T and Southen Pacific.

④ It attempts to provide a reasonable mechinism for specifically objectionable sales of extreme nature.

⑤ It should minimally disturb the startup viability of the company given ①, ② and ③.

PLAN 2

No more than _____% of all sales of Pacific Software Manufacturing Company will be for military end uses. It is the joint and several responsibility of the officers of Pacific Software to ensure that this policy is realized. There is complete consesus on this issue.

PLAN 2

It is the policy of Pacific Software Manufacturing Co. that military uses will not become a sole, principle, substantial, major, nor disproportional part of Pacific's sales. It is the joint and several responsibility of the officers of Pacific Software to ensure that this policy is realized. There is complete consesus on this issue.

PLAN B

1. Pacific Software Manufacturing Company does not sell directly to military departments of governments.

2. Pacific Software Manufacturing Company does not participate in military procurements.

Typing with in PIL

Ted this scheme is to have you build the typing information in PIL. It is a little unfortunate, in that the type relationships really belong in the transforms, however in PIL they let George query for the type of an expression. So it goes, the question is will this work easily in PIL?? It means each operation which combines subtrees, must figure the resultant type and assign it the joining node. The scheme is basically yours.

The type field would become a 16 bit node pointer to a symbol containing a complete type or to a structure prototype and a byte containing a 4-bit dereference count and a 4-bit simple type. The simple type need code only the most basic types:

pointer
struct
byte
short
long
float
double
void
(possibly not known)

The 4-bit dereference count provides for 15 levels of indirection. The simple type is included only for improving preformance, it can always be computed from the dereference count and the full type. The simple type of a pointer to int is pointer, not int.

Length can be computed in the same manner, but that is a long calculation so I want to add a length field to those nodes at which length is interesting. This field gives the length after the operation is done. For example the length on an index node is that of the element being indexed (which might be a several dimensional array) and the length on a structure reference is that of the element being pointed at. The nodes which need this field are only:

symbol nodes
type prototype nodes
index operation nodes
structure reference nodes

The question of length can be asked of other kinds of nodes and in that case it must be calculated from the deferencing count and the full type.

The type information routines should be made to work on non-symbol nodes of a few routines introduced to replace them. In addition it should be possible to ask what the simple type of something is.

That is we need the means to determine -

Full Type
Base Type
Simple Type
Length

for any expression.

Within the transforms there must also be the means to get the above information, to set the type field of a manufactured node, and to create a type which is a dereference of another. [Note that a dereference which goes through a structure base type may cause a type with more levels of reference to another type!]

be just
don't be Reactive
don't ~~be~~ assume you're
more moral here than
these people collectively
(or individually) after
they hear argument.
Tom is on your side -