

# The International Origins of the Internet and the Emergence of the Netizen: Is the Early Vision Still Viable?

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"By the political element I mean the right to participate in the exercise of political power... as a member of a body invested with political authority."  
(T. H. Marshall, *Class, Citizenship and Social Development*)

## Part I: Introduction

I am honored to be speaking today in France at the European Parliament to students at the interesting conference "Europe & Internet". (1)

It is here in France that the modern vision and practice evolved of the citizen, of the citizen as the new sovereign replacing the King. The German philosopher Habermas captured this spectacular achievement in the phrase, "Nous sommes le roi." ("We are the king.")

Today I want to explore a vision for the future, a vision that builds on the inspiration provided the world by the French concept of "the citizen". This new form of "citizen" that has grown up with the Internet, is called the "netizen".

In raising this topic I also want to point with interest to the concept of a European citizenship that European construction has posed. The Polish researcher, Leszek Jesien, describes the discussion on this issue at an EU Conference in 1996. Quoting an EU official, he writes (2):

"The defining point of this process will be the transition from the concept of the market to that of citizenship, by which I mean a greater direct involvement of the citizens in the running of the Union." (Jesien, page 2)

Jesien proposes that this is a particular challenge because “in the ‘democratic world’ the citizens are dissatisfied with their political institutions, their politicians, the way ‘things are going’ in their countries.”

He offers as examples the U.S., Belgium, Italy and Austria. (Jesien, page 7)

He is not proposing that “the netizen” replace “the citizen”. (3) Rather he is considering how there can continue to be the citizen participating in his or her national government, and also another form of citizenship that will function for the European Union.

Jesien begins his paper with some definitions of Netizens. One of these definitions is something he quotes from the work of Michael Hauben, who in 1996 (when Jesien’s paper was written) was a student at Columbia University in New York City.

Instead of thinking about the Internet merely as a means of communicating information, Michael stresses that it is the people online who make the Net an important resource. Jesien quotes Michael:

“Netizens are Net Citizens.... These people are... those [who]... make [the Net] a resource of human beings. These netizens participate to help make the Net both an intellectual and a social resource.” (Jesien, before page 1 quoting Michael Hauben, “Further Thoughts about Netizens”, [http://www.columbia.edu/~hauben/CMC/netizen\\_thoughts.html](http://www.columbia.edu/~hauben/CMC/netizen_thoughts.html))

Jesien is looking for a form of citizenship not based on geography. He is seeking to identify what the defining aspects of such a citizenship would be. After considering various possible characteristics, such as guaranteed rights, social obligations, certain social benefits or needs, he notes that “by fulfilling all possible needs... of the people we do not create citizenship.” He proposes that such characteristics may be a necessary condition but not a sufficient one. He refers to secessionist movements like those in Quebec, Canada, the Basque region in Spain, and Corsica in France, in support of his conclusion that providing for the needs of citizens is not adequate. (Jesien, page 3)

Jesien does, though, identify a form of citizenship not dependent upon geography - but requiring participation. He writes (remember this is in 1995-1996):

“Almost in front of us, and almost unnoticed the new kind of citizenship is evolving. The Netizenry - those who use the Internet.

Without much attention, without governments and power, without financial incentives and social entitlements. But using the Internet today is a sign of belonging... to those who exchange ideas, who participate in something important, in a common cause. There is no question of governance there, nor the question of representation, but there is full, ultimate and direct participation. Of course, the notion of netizenship would not come out, perhaps would not even emerge yet, if there was no intrusion, no attempt to control or censor the Internet. Those who use it oppose the encroachments of the 'outside' power fiercely. The battle gives them an additional sense of commonality..." (Jesien, page 15)

Jesien concludes his paper:

"At the time the European Union struggles to shape the European citizenship with much effort and little success, the other citizenship - Netizenship emerges." (*Ibid.*)

He recommends that the European "negotiators and... political leaders should look at this phenomenon with sympathy and attention." (*Ibid.*)

In my talk today, I will look at the phenomenon of the emergence of the netizen and netizenship and at the early vision and international collaboration. This vision provided the inspiration for both the birth of the Internet and the birth of the Netizen. I hope this will prove helpful for those who are interested in the problem of European construction and for those concerned about the continued care and development of the Internet.

## **Part II: The Emergence of the Netizen**

In 1992-1993, Michael Hauben, co-author of the book *Netizens: On the History and Impact of Usenet and the Internet* was in his 2nd year as a college student at Columbia University in New York City. Describing the research that he did which revealed the emergence of Netizens, Michael writes:

"I started using local bulletin board systems (called bbs's) in Michigan in 1985. After several years of participation on both local hobbyist-run computer bulletin board systems and the global Usenet, I began to research Usenet and the Internet."

"This was a new environment for me," he continues. "Little

thoughtful conversation was encouraged in my high school. Since my daily life did not provide places and people to talk with about real issues and real world topics, I wondered why the online experience encouraged such discussion and consideration of others. Where did such a culture spring from? And how did it arise? During my sophomore year of college in 1992, I was curious to explore and better understand this new online world.” (*Netizens*, “Preface”, page ix)

The computer bulletin board culture being described flourished in the US and parts of Europe and elsewhere in the 1980s to the early 1990s. As a hobby, computer users set up their own home computers to make it possible for other people to call, leave messages or programs, respond to the messages or download the programs. They used modems and the telephone lines to connect their computers. As a teenager in Michigan in the 1980s, Michael was part of this computer bulletin board community of sharing ideas, discussion and software. From other computer users who were part of this community, he learned about the Internet. By the early 1990s the Internet had become a network of networks that spanned the globe. Michael also learned of Usenet which used telephones, computers, modems and the Unix operating system to send messages around the world. Usenet and the Internet made it possible for computer users to have online discussions with people from other parts of the world, to share technical problems, and to get help from a global online community.

By 1995, Michael’s research was recognized internationally, and he was invited to Japan to speak at a conference about the subject of *Netizens*. In his talk, he describes his early investigation of Usenet and the Internet. He explains how “As part of course work at Columbia (University) I explored these questions. One professor encouraged me to use Usenet and the Internet as places to conduct research. My research was real participation in the online community, exploring how and why these communication forums functioned.” He continues, “I posted questions on Usenet, mailing lists and freenets [Freenets were just springing up at the time as community networks which provided local people with free access to the Internet- ed]. Along with my questions I would attach some worthwhile preliminary research. People respected my questions and found the preliminary research helpful. The entire process was one of mutual respect and sharing of research and ideas, fostering a sense of community and participation.” (*Netizens*, page ix)

Through this research process, he “found that on the Net people willingly help each other and work together to define and address issues important to them.” (*Ibid.*)

This was the experience people had on Internet mailing lists and Usenet newsgroups in the early 1990's, before the web culture had developed and spread. What one found was a great deal of discussion and interactive communication online. This was like the computer bulletin board culture that flourished in the 1980s and early 1990s. While the computer bulletin boards put users in contact with local computer users, Usenet newsgroups and Internet mailing lists put users in contact with other computer users from around the world. When Michael posted his early research questions on Usenet and the Internet he received about 60 responses from around the globe. A number of these responses were detailed descriptions of how people online had found the Net an exciting and important contribution to their lives.

Elaborating on the progression of his research, Michael writes:

“My initial research concerned the origins and development of the global discussion forum Usenet. For my second paper, I wanted to explore the larger Net, what it was, and its significance. This is when my research uncovered the remaining details that helped me recognize the emergence of Netizens.” (*Netizens*, page x)

While people answering his questions were describing how the Internet and Usenet were helpful in their lives, many wrote about their efforts to contribute to the Net, and to help spread access to those not yet online. It is this second aspect of the responses that Michael received which he recognized as an especially significant aspect of his research.

Describing the characteristics of those he came to call netizens, Michael writes:

“There are people online who actively contribute to the development of the Net. These are people who understand the value of collective work and the communal aspects of public communications. These are the people who discuss and debate topics in a constructive manner, who e-mail answers to people and provide help to newcomers, who maintain FAQ's, files and other public information repositories. These are the people who discuss the nature and role of this new communications medium. These are the people who as citizens of the Net I realized were Netizens.” (*Netizens*, pages ix-x)

Later Michael elaborates:

“Net.citizen was used in Usenet... and this really represented what people were telling me - they were really net citizens - which

Netizen captures. To be a 'Netizen' is different from being a 'citizen'. This is because to be on the Net is to be part of a global community. To be a citizen restricts someone to a more local or geographical orientation." (From "Webchat with Michael Hauben," Jan. 25, 1996)

Michael was not referring to all users who get online. He differentiates between netizens and others online:

"Netizens are not just anyone who comes online. Netizens are especially not people who come online for individual gain or profit. They are not people who come to the Net thinking it is a service. Rather, they are people who understand that it takes effort and action on each and everyone's part to make the Net a regenerative and vibrant community and resource." (*Netizens*, page x)

The talk Michael was invited to present in Japan, was given in November 1995. The talk reflected his experiences and online research from 1992-1995.

By 1995 the U.S. portion of the Internet was becoming increasingly commercialized. There was an effort on the part of the U.S. mass media to promote a "get rich quick" view of the Internet. Many who have come online since 1995 have not had the experience of the early culture of interactive participation and sharing that prevailed through the early 1990s. Instead these origins are hidden and the early development of the Internet is erroneously characterized as a period of "exclusivity". This is not an accurate description. By the early 1990s users were finding ways to spread the Internet through civic efforts like creating community networks and Freenets and through creating gateways between different networks like the Unix UUCP network and the Internet and Fidonet. But by 1995 the U.S. government no longer supported the efforts which continued the sharing and cooperative culture of the early Internet. Instead there was a vigorous campaign to commercialize and privatize the U.S. portion of the public Internet. (The way this was done was probably also in violation of U.S. constitutional provisions with respect to the necessary public processes to be undertaken before public property is privatized. However, the commercial pressure to carry the privatization out quickly left little time to challenge the process.)

In response to the growing commercialization and privatization, Michael and I set out to do research into the origins of the sharing, participatory Internet and Usenet culture to better understand the nature of the interesting online world we had become part of in the early 1990's.

In January 1994 we put a draft book online documenting the origins of the

online network and culture it gave birth to. In his preface to the book Michael wrote:

“As more and more people join the online community and contribute towards the nurturing of the Net and towards the development of a great shared social wealth, the ideas and values of netizenship spread. But with the increasing commercialization and privatization of the Net, Netizenship is being challenged. During such a period it is valuable to look back at the pioneering vision and actions that made the Net possible and examine the lessons they provide.” (*Netizens*, page xi)

### **Part III: Historical Origins of the Vision for the Net**

#### **#1**

Through studies of the history of the Internet, it became evident that the vision for its development had been pioneered by JCR Licklider, an experimental psychologist interested in human factors engineering.

“The world of the Netizen,” Michael writes, “was envisioned more than twenty-five years ago by J.C.R. Licklider. Licklider brought to his leadership of the U.S. Department of Defense’s ARPA program a vision of the ‘intergalactic computer network’.”

Licklider introduced this vision when he gave talks for the ARPA program inspiring people with the idea of the importance of a new form of computing and of the potential for a network that would make it possible to communicate utilizing computers.

In a paper that Licklider wrote with Robert Taylor in 1968, they established several principles about how the computer would play a helpful role in human communication. (4) They wrote:

“We believe that communicators have to do something nontrivial with the information they send and receive... to interact with the richness of living information - not merely in the passive way that we have become accustomed to using books and libraries, but as active participants in an ongoing process, bringing something to it through our interaction with it, and not simply receiving from it by our connection to it.” (Licklider and Taylor, page 21)

“We want to emphasize” they continue, “something beyond its one-way transfer: the increasing significance of the jointly constructive, the mutually reinforcing aspect of communication - the part that transcends ‘now that we both know a fact that only one of us knew before.’ When minds interact, new ideas emerge.” (*Ibid.*)

Michael had experienced the importance of online interaction among people with different ideas. From the diversity, something new developed.

“The network of various human communicators quickly forms,” he writes, “changes its goals, disbands and reforms into new collaborations.” (*Netizens*, page 6)

“The fluidity of such group dynamics leads to a quickening of the creation of new ideas. Groups can form to discuss an idea, focus in or broaden out, and reform to fit the new ideas that have been worked out.” (*Ibid.*)

The virtual space created on noncommercial networks was accessible to all, while the content on commercial networks like Compuserve or America Online was only accessible by those who paid to belong. (*Netizens*, pages 6-7)

## #2

By the early 1990's the research Licklider had initiated at the Advanced Research Projects Agency (known as ARPA) had led to the development of first the ARPANET and then the Internet. Also an effort by graduate students to have an online newsletter resulted in a newsgroup network known as Usenet.

In 1996, Michael wrote that the Net should be like a public utility - akin to postal/telephone/water. While he did not necessarily favor regulation, he explained that regulation by government would be necessary to have equal access available to all to the net. “The market,” he predicted, “would not make the Internet available in areas where it could not make a profit (and that the Net would lose if all potential contributors were not able to participate.)”

Michael saw the Internet and Usenet as a communications public utility that needed government support so that it could be available to all.

In response to a sensitivity among many online in the U.S. about government regulation meaning potential censorship, he emphasized that “Regulation does not mean censorship... Rather regulation means putting the public interest over the commercial or private interest. The Net is a shared commons, which means it



is important to make it available to the many, and not grabable by the few.” (WEBCHAT, [http://www.columbia.edu/~hauben/CS/jr\\_gii\\_summit-webchat.txt](http://www.columbia.edu/~hauben/CS/jr_gii_summit-webchat.txt))

By 1996, he found that:

“Advertising will (and is) polluting the online world. Those with money will quickly take over the spaces (... and) those without money will not be able to. And those thinking of money are not thinking about a global cooperative community - they are thinking of themselves.” (*Ibid.*)

He believed that commercial entities couldn’t develop a network that would spread access to all, a network that would encourage user participation in its development.

He also proposed the need for citizens to find ways to influence their governments to counter the pressure on government by commercial entities to direct the Internet’s development in commercial directions.

### #3

A cornerstone before commercialization was the broad ranging discussion on Usenet or mailing lists. This discussion encouraged the interaction and exchange of diverse viewpoints. “Only by seeing many points of view,” writes Michael, “can one figure out his or her position on a topic.” Many of the people who responded to his research questions told how they valued hearing from people with different experiences and points of view. “Brainstorming among different types of people,” he concludes, “produces robust thinking.” (*Netizens*, pages 4-5)

“Information is no longer a fixed commodity or resource on the Net. It is constantly being added to and improved collectively,” he observes, explaining, “The Net provides an alternative to the normal channels and ways of doing things. The Net allows for the meeting of minds to form and develop new ideas. It brings people’s thinking processes out of isolation and out into the open. Every user of the Net gains the role of being special and useful. The fact that every user has his or her own opinions and ideas adds to the general body of specialized knowledge on the Net.”

“Each netizen” he maintains, “thus becomes a special resource valuable to the Net.” (*Ibid.*)

## **#4**

In the course of researching the origins of networking, Michael discovered the source of the culture of sharing and cooperation. Developing the Internet was “not a commercial process... The ‘selflessness’ grew out of the fact that technology required helping each other to succeed - for people to develop and further computing technologies.” He also recognized the need for open code and for the open publication of the technical developments. He writes:

“The public funding of the ARPANET project meant that the documentation would be made public and freely available. The documentation was neither restricted nor classified. This open process encouraging communication was necessary for these pioneers to succeed. Research in new fields of study requires that researchers cooperate and communicate in order to share their expertise. Such openness is especially critical when no one person has the answers in advance.” (*Netizens*, page 109)

## **#5 Protection**

Michael pointed out that both Usenet and the Internet flourished in their early development because they were protected from commercial use.

He writes: “Usenet has not been allowed to be abused as a profit-making venture by any one individual or group. Rather people are fighting to keep it a resource that is helpful to society as a whole.” (*Netizens*, page 55)

## **#6**

Commercial usage was prohibited on the U.S. part of the emerging Internet known as the NSFnet. “There were Acceptable Use Policies (AUP) that existed because these networks were initially founded and financed by public money.”

This protection then extended to the networks from other countries that connected to the NSFnet. “On these networks,” he writes, “commercial usage was prohibited, which meant it was also discouraged on other networks that gatewayed into the NSFnet backbone.” (*Netizens*, page 29)

Not only did government regulation provide a protection from commercial abuse during the Net’s development, but the developing network also provided a means for citizens to affect and influence their governments.

Recognizing the need for protection for such a medium, Michael urges the importance of the net and of protecting the people's ability to develop its potential. He writes, "For the people of the world, the Net provides a powerful means for peaceful assembly. Peaceful assembly allows people to take control. This power deserves to be appreciated and protected. Any medium that helps people hold or gain power is something special that has to be protected." (*Netizens*, page 26)

## #7

A study Michael did of an online conference sponsored by the US government in November 1994 showed the potential of the Net for making available to government a broad range of public views on an important new development like the Internet. Similarly, discussion groups such as those that Usenet provided could grow to provide a forum through which people would be able to influence their governments. Also such forums would allow for discussion and debate of issues in a mode that facilitates mass participation. Such discussion, Michael writes, "becomes a source of independent information. An independent source is helpful in the search for truth." (*Netizens*, page 56) But universal access to the Internet is necessary to fulfill its promise. The Internet is identified as a "public good" that needs to be accessible to all the population. (*Netizens*, page 246)

Michael recognized the difference between the view towards Usenet and the Internet that he received in the responses to his research questions and the view towards the future development of the Net which was being proposed then by the US government.

## #8

Describing the two different views, he writes:

"The picture of the Internet painted by the U.S. government has been one of an 'information superhighway' or 'information infrastructure' to which people could connect, download some data or purchase some goods, and then disconnect. This image is very different from the... cooperative communications forums on Usenet where everyone... (was welcomed to-ed) contribute. The transfer of information is secondary... in contrast to the reality that the Internet and Usenet (can-ed) provide a place where people can share ideas, observations and questions." (*Netizens*, page 254)

## #9

An important democratic development occurred. Users on Usenet and mailing lists were able to be the architects of the evolving networks. Michael writes:

“The basic element of Usenet is a post.

Each individual post consists of a unique contribution from a user, placed in a subject area called a newsgroup.

Usenet grew from the ground up in a grassroots manner.

(...) In its simplest form, Usenet represents democracy. Inherent in most mass media is central control of content. Many people are influenced by the decisions of a few... Usenet, however, is controlled by its audience... Most of the material for Usenet is contributed by the same people who actively read Usenet. Thus, the audience to Usenet, decides the content and subject matter to be thought about, presented and debated.

The ideas that exist on Usenet come from the mass of people who participate in it. In this way, Usenet is an uncensored forum for debate where many sides of an issue come into view... People control what happens on Usenet. In this rare situation, issues and concerns that are of interest and thus important to the participants, are brought up... The range of Usenet connectivity is international and quickly expanding into every nook and cranny around the world. This explosive expansion allows growing communication with people around the world.” (*Netizens*, page 49)

## #10

From Usenet pioneers like Greg Woodbury, Michael learned that, “it was the desire for communication that helped this social network develop and expand.” While appreciating the potential of Usenet and the Internet to help people make a better world possible, many of those online in the mid 1990s also anticipated how difficult it would be to bring this about.

## **#11**

“People on the Net,” Michael writes, “need to be active in order to bring about the best possible use of the Net.” (Webchat)

### **Part IV**

It is interesting to see how closely the conceptual vision Michael developed matched that of the vision of JCR Licklider.

Michael’s views were influenced by his experience online, his study and the comments he received in response to his research questions from people around the world. (5)

Subsequent research shows that Licklider had recognized the need for an online community that would encourage users to contribute to be able to develop computer and network science and technology. This collaborative environment is what people found online on Usenet and the Internet even into the early 1990s.

Also Licklider advocated support and protection of the creative users online who were eager to explore how to utilize the Internet in interesting and novel new ways. Licklider staunchly maintained that users had to be participants in making the decisions that would develop and spread the Internet to all. He warned that commercial entities could not develop a network that would spread access to all or that would encourage user participation in its development.

### **Part V**

In order to understand the nature of the vision represented by the emergence of the Netizens, however, it is helpful to understand the early development of the Internet. Licklider had a vision of a network that would link up people around the globe. He called this future network an intergalactic network. People would be able to communicate to form communities of interest, rather than being limited by communities of geography.

By the mid 1960s research on a network to connect different ARPA researchers and their computers was initiated. The purpose of the research was to encourage the sharing of resources among the researchers, both the sharing of human and of computer resources.

This research helped to create something that came to be called the

ARPANET. If you wanted to join it, the US Department of Defense would have to approve your request and you could not have your own network. Rather your computer would have to become a node of the ARPANET.

At this time there was much interest in networking around the world, including various European countries like France, Great Britain, Belgium, Italy and Germany. There was also interest in Canada and Japan and other countries. (6)

While the US was doing its research developing the ARPANET, France was doing research to develop a packet switching network called Cyclades under the leadership of Louis Pouzin. In Great Britain Donald Davies and his team at the National Physical Laboratory (NPL) were doing packet switching network research. There was a project to develop a European network which would include several European countries.

The important question these different research projects raised was how would it be possible to communicate across the boundaries of such dissimilar networks. Each network was different technically, based on the technical needs of the different countries. Also they were under different forms of administrative and political ownership and control.

You would not expect that any government sponsored network would agree to become a subordinate part of another government sponsored network, or that the countries would wait to build their networks until there were decisions determined by all on how to link up dissimilar networks.

A different means of communication was needed, different from the ARPANET, a means that would make it possible to pass packets of computer data across the boundaries of dissimilar networks under different forms of ownership and control.

The process of solving this problem with a working protocol took 10 years. It required the creation of a set of agreements called a protocol, a protocol that would be as simple as possible, but which would make it possible to take data from the form one network conveyed it and transform it into the form for the next network. The transforming mechanism was called a gateway. The protocol that was created was called TCP/IP, or Transmission Control Protocol/Internet Protocol.

The process involved experimentation with different forms of networks. Not only was there an effort to involve different countries in the research, but there was also the effort to create very different forms of networks and make it possible for them to communicate. The different networks included a satellite network

called SATNET, and a packet radio network called RadioNet or PRNET.

The earliest research to create a version of the TCP/IP protocol involved Great Britain, Norway and the US, with significant contributions from researchers from France and other countries as part of the effort.

The Internet research was research in connecting diverse kinds of packet networks. It was designed so that one wouldn't need permission to connect. Rather one could set up a computer and send packets from it to another network through a gateway.

An important part of this research required that the scientists from different countries be able to communicate easily and be fully informed of the developments. In an article about how the SATNET was created, Bob Kahn, who was head of IPTO during the early Internet development, writes about the importance of the network to make the collaboration of people in different countries possible. He writes (7):

“Coordinating a program involving participants from multiple countries was an important challenge that was met at several different levels... The ARPANET played a particularly important role in executing the effort as well as in coordinating it... The message passing capability of the hosts on the ARPANET were used to keep all participants informed of technical progress, system status, often by direct reporting from the programmable satellite processors in SATNET, and to resolve questions and coordinate experiments on a day-by-day basis. Without such a capability, it is doubtful that the overall experimental program could have been carried out successfully.”

While this early research was dependent on communication among the researchers from different countries, other political and technical developments meant that some countries like France and Germany were leery of American domination and were working to develop another form of network. Such efforts, according to Peter Kirstein from Great Britain, meant there was a need to make actual collaboration possible. The Unix operating system and the Usenet newsgroup network were such collaborative means. Kirstein explains that it was the early spread of email and newsgroups that developed the international collaboration that was critical to the spread of the TCP/IP protocol and the Internet across Europe. (8)

Involved in the early development of Usenet and Unix in Europe were France, and Great Britain, Germany, the Netherlands and Austria, Ireland among other

countries.

While these developments were making it possible to create an international network, there were also difficulties that the researchers faced. For example, in the US there was a shift in research goals to favor more product oriented, rather than basic research. (9)

Another very important aspect of networking development involves the means of communication used by the researchers who were also the users of the networks.

Early on, both on the developing Internet and on Usenet, the users were seen as important. They were able to shape the developing network. They would identify the problems as the Net grew and spread. And they worked together to find ways to solve the problems.

A tradition among the Unix community, according to Henry Spencer, an early Canadian Usenet pioneer, was that there was honesty about the problems and an openness to admitting them so that there would be a way to involve the community in helping to solve them.

## **Part VI**

Transportation, computing and communications technologies were creating the infrastructure for a global culture. (See “Culture and Communication: the Impact of the Internet on the Emerging Global Culture”) Michael refers to Margaret Mead’s observation that part of the global commonality among peoples has developed through the spread of scientific understanding and technological developments.

“It is important to understand,” he writes, “that coupled with the desire for technological advances is the understanding of the need to control the introduction of such technology and participate to have its use benefit the particular peoples in their particular needs. The peoples of the world understand that with the implementation of technology comes a responsibility for the management and careful handling of that technology. He quotes Mead, explaining: “True communication is a dialogue.” (10). According to Mead, true communication occurs “... in a world in which conflicting points of view rather than orthodoxies are prevalent and accessible.”) (Mead, 1978, p. 80) Michael understood from Mead’s work that within the vision of a new global community there needs to be the space for the contributions of each different culture. And he agrees with Mead when she writes, “within the new vision, there must be no



outsiders.” All have to be included as participants.

## **Part VII: The Future**

In a similar way JCR Licklider emphasized the need for a participatory evolution for the Internet, and for there to be a public utility framework for its development, Licklider proposes that there is a public policy choice that must be made. He writes (11):

“It’s a choice between data and knowledge. It’s either mere access to information or interaction with information. And for mankind it implies either an enmeshment in silent gears of the great electrical machine or mastery of a new and truly plastic medium for formulating ideas and for explaining, expressing and communicating them.” (Licklider, “Social Prospects of Information Utilities” in *The Information Utility and Social Choice*, H. Sackman and Norman Nie, editors, AFIPS Press, Montvale, 1970, p 6)

Michael and a friend he met when he was invited to Japan proposed a Netizens Association as a way to take up the challenges of evolving a network that would support interactive communication and user participation. (12) Such an association could take on the goals of the Netizen and netizenship. It could be a help in the struggle to forge a net that will carry on the vision of an interactive participatory network of networks that Licklider introduced. In January 1994 Michael put together a *Draft Declaration of the Rights of Netizens* which could be a starting point for a collaboration of Netizens who are committed to the original vision for the Internet. This vision has made it possible for the Internet to develop an infrastructure capable of promoting vibrant interactive participation and resource sharing before the commercialization and privatization of the Net. Michael writes in the *Draft Declaration of the Rights of Netizens*:

“The Net is not a Service, it is a Right. It is only valuable when it is collective and universal. Volunteer effort protects the intellectual and technological common-wealth that is being created. DO NOT UNDERESTIMATE THE POWER OF THE NET and NETIZENS.”  
(13)

## **Part VIII: Conclusion**

The vision of JCR Licklider and then of users who Michael recognized were netizens has helped to guide and spread a participatory and interactive new form

of communication infrastructure.

However the commercial model for the Internet's development is very different. It aims to create passive users who are at the mercy of powerful corporations both for their access to the Net and for the determination of how they can use the Net. The commercial model is a challenge to the early vision of a participatory Internet where all the population has the possibility of gaining access and of shaping the network form and content that is socially beneficial.

How do netizens support each other to continue working toward their goal? Is there a need for a netizens association as Michael and his friend from Japan Hiro proposed? The path forward is not well marked. The linguist, Bar Hillel explained, when giving a talk in the 1960s at a conference at MIT about the future of the computer, we cannot know the future. (14) If however we know what we are striving for we can work toward this goal. With this as our perspective there is again the promise the potential of the Internet offers being realized.

## Footnotes

1) The conference was "Semaine Européenne" sponsored by L'Institut d'Etudes Politiques (IEP). More than three hundred students attended and participated in a week long discussion of "Europe & Internet" in the Winston Churchill building of the European Parliament. The conference was held February 25, 2002 through March 1, 2002.

2) "We can only agree with Silvio Fagiolo the first chairman of the 1996 Intergovernmental Conference under the Italian Presidency..." Leszek Jesien, "The 1996 IGC: European Citizenship Reconsidered", *Instituets fur den Donauration und Mitteleuropa*, March 1997, page 2.

3) As Klaus Schwab, the founder of the World Economic Forum, recently proposed. He writes: "The 21st century will be the age of globalization. The technological revolution of the microchip and the Internet have taught us that all types of "walls" have crumbled in a world that is becoming more virtual than material. The Web puts power in the hands of people in a way that the voting ballot could never do. The 'netizen' replaces the citizen." (See *Challenges for the 21st Century, the American Forum for Global Education*, Issue 168, 2001-2002, p.2)

4) Licklider, J.C.R. and Robert Taylor. "The Computer as a Communication Device." In *Science and Technology: For the Technical Men in Management*. No 76. April, 1968. Pages 21-31. Also reprinted in "In Memoriam: J.C.R. Licklider:

1915-1990". *Report 61*. Systems Research Center. Digital Equipment Corporation. Palo Alto, California. August 7, 1990. Pp. 21-41.12

5) See also the Livingnet website <http://livinginternet.com/>. William Stewart, the creator of the site, writes:

"Joseph Carl Robnett 'Lick' Licklider developed the idea of a universal network, spread his vision throughout the IPTO, and inspired his successors to realize his dream by creation of the ARPANET. He also developed the concepts that led to the idea of the Netizen."

6) This interest is documented in the many papers from networking researchers around the world presented in October 1972 at the first International Conference of Computer Communications which was held in Washington D.C.

7) Quarterly review meetings were held (rotated among the different locations) and attended by all the participants. Technical progress was reviewed at these meetings, technical issues were discussed and resolved and plans for each succeeding quarter were refined. Research issues and results were documented and circulated in a series of informal working group notes. (Bob Kahn, NTC page 45.1.5) Satnet "provided the means by which the satellite processors were downline loaded and debugged, and the means by which SATNET itself was controlled and monitored as it was being developed."

8) Peter Kirstein in "Early Experiences with the ARPANET and INTERNET in the UK" ([www.computer.org/annals/an1999/a1038abs.htm](http://www.computer.org/annals/an1999/a1038abs.htm)) writes:

"Incidentally, the German, Italian and Norwegians did not pursue a similar route. In the late 70s, their growth of National Research networks was much slower, and quite divorced from any strong Internet links... For this reason it was not possible for a significant academic involvement from those countries with their US colleagues, until USENET, EARN and other similar Internet developments took off in the middle 80s."

9) In Europe there was the effort to create a protocol that would be of European origin - OSI.

10) Mead, Margaret. (1978). *Culture and commitment: The new relationships between the generations in the 1970s*. Garden City, NY: Anchor Books/Doubleday. Page 77.

11) "Thus though the crux is a switch. It is not a switch in a level track. One branch goes down, one up."

12) Michael writes: "After our visit, I wrote Hiro Takashi that I was very happy to have met him and his friends from their computer club at his University. In his email when I returned home he asked if there was a Netizens Association. He wrote in a P.S. in an email of Dec. 6: 'Netizen association is available? If not in Japan, I want to make it.' I told him I did not know of any and asked him what he had in mind for a Netizens association to do. He responded: 'I think [a] Netizen Association is a guide into tomorrow's Internet world. Internet and other network[s] have a flood of electrical informations. So people cannot swim very good in Internet. So Netizen Association tell or advise how to swim or get selected information. The association act as guide. Oh, and we have to spread information about concept of netizen. But making association process has many difficult points, I think. So we have to give careful consideration to the matter.'"

### 13) Proposed *Declaration of the Rights of Netizens*

We Netizens have begun to put together a *Declaration of the Rights of Netizens* and are requesting from other Netizens contributions, ideas, and suggestions of what rights should be included. Following are some beginning ideas.

#### **The Declaration of the Rights of Netizens:**

In recognition that the net represents a revolution in human communications that was built by a cooperative non-commercial process, the following *Declaration of the Rights of the Netizen* is presented for Netizen comment.

As Netizens are those who take responsibility and care for the Net, the following are proposed to be their rights:

- Universal access at no or low cost
- Freedom of Electronic Expression to promote the exchange of knowledge without fear of reprisal
- Uncensored Expression
- Access to Broad Distribution
- Universal and Equal access to knowledge and information
- Consideration of one's ideas on their merits
- No limitation to access to read, to post and to otherwise contribute
- Equal quality of connection
- Equal time of connection
- No Official Spokesperson
- Uphold the public grassroots purpose and participation
- Volunteer Contribution - no personal profit from the contribution freely given

by others

- Protection of the public purpose from those who would use it for their private and money making purposes

The Net is not a Service, it is a Right. It is only valuable when it is collective and universal. Volunteer effort protects the intellectual and technological common-wealth that is being created. DO NOT UNDERESTIMATE THE POWER OF THE NET and NETIZENS.

Inspiration from: *RFC 3* (1969), Thomas Paine, *Declaration of Independence* (1776), *Declaration of the Rights of Man and of the Citizen* (1789), *NSF Acceptable Use Policy*, Jean Jacques Rousseau, and the current cry for democracy worldwide.

14) Bar Hillel in *Computers and the World of the Future*, edited by Martin Greenberger, MIT Press, 1962, page 324.