COOKING WITH THE JOLLY ROGER because he's lost again, but he wanted you to know about the Internet, so here it is.

FYI ON "WHAT IS THE INTERNET?"

This FYI RRC answers the question, "What is the Internet?" and is produced by the User Services Working Group of the Internet Engineering Task Force (IETF). Containing a modified chapter from Ed Krol's 1992 book, "The Whole Internet User's Guide and Catalog," the paper covers the Internet's definition, history, administration, protocols, formatting, and current issues such as growth, commercialization, and privatization.

Introduction

A commonly asked question is "What is the Internet?" The reason such a question gets asked so often is because there's no agreed upon answer that easily sums up the Internet. The Internet can be thought of as a large, evolving system of computer networks, a global collection of routers and circuits, as a set of shared resources, or even as an art form to link and interconnect. And some common definitions given in the past include:

- a network of networks based on the TCP/IP protocols;
- a community of people who use and develop those networks;
- a collection of resources that can be reached from those networks.

A recent report on emerging influences states that began as an experiment over 20 years ago by the U.S. Department of Defense. While the networks that make up the Internet are based on a standard set of protocols, a protocol is a set of rules for communication between two or more processes. The Internet also has gateways to networks and services that are based on other protocols.

To help answer the question more completely, the rest of this paper contains an updated second chapter from "The Whole Internet User's Guide and Catalog" by Ed Krol (1992) that gives a more thorough discussion.

The Internet

(excerpt from "The Whole Internet User's Guide and Catalog")

The Internet was born about 20 years ago, trying to connect together a U.S. Defense Department network called the ARPAnet and various other radio and satellite networks. The ARPAnet was an experimental network designed to support military research - in particular, research about how to build networks that could withstand partial disconnection. The ARPAnet was a small network, but it did a lot to codify and standardize the Internet system. (Think about this when I describe how the network works; it may give you some insight into the design of the Internet.) In the ARPAnet model, communication always occurs between a source and a destination computer. The network does not care which path is taken, or if any portion of the network could disappear at any moment (pick your favorite catastrophe - these days backhoes cutting cables are more of a threat than tornadoes). The minimum of information was sent from the computer to the destination computer. A message passing system was used to send a message. The system was designed to be robust, efficient, and scalable. The network was designed to be reliable, and to provide access to a wide range of information.

The Internet has grown from an experimental network to a global network with millions of users. The Internet is now used for a wide variety of purposes, from electronic mail to online shopping. The Internet is a huge network with millions of users, and it is constantly evolving. The Internet is a complex system, and it is not possible to completely describe it in a single chapter. However, I will try to give you an overview of the basic concepts and characteristics of the Internet.

What Makes Up the Internet?

What comprises the Internet is a difficult question; the answer changes over time. Five years ago the answer would have been routers, switches, and electronic mail. Now it includes the Internet as a whole, with a wide variety of computer networks connected to it. The Internet is not just a collection of computers; it is a network of networks.

The Internet is a network of networks, which means that there is no single authority for the Internet as a whole. The ultimate authority for the Internet is the Internet Engineering Task Force (IETF), which is responsible for the technical management and direction of the Internet. The IETF standards and practices are based on a set of "best practices" standards and allocate resources, like addresses. The Internet works because there are standard ways to route messages and that the messages are delivered to the correct destination. The Internet is not an easy job, but it is an important job. The Internet is not an easy job, but it is an important job. The Internet is not an easy job, but it is an important job.

What Does This Mean for Me?

The concept that the Internet is not a network, but a collection of networks means little to the end user. You want to do something useful: run a program, or access some unique data. You shouldn't have to worry about how it all works together. The next time you use the Internet, you will probably see a page that says "Welcome to the Internet." It will include a list of websites that you can visit, and a link to get more information.

What Does the Future Hold?

Finally, a question can answer. It's not that I have a crystal ball (if I did, I'd be making a lot of money), but rather that the Internet is constantly changing. The technologies that are used today will be replaced by new ones in the future. The best way to stay informed about the Internet is to follow the discussions on the Internet. You can find information about the Internet by visiting the websites of organizations such as the Internet Society (ISOC) and the Internet Research Task Force (IETF). These organizations are responsible for the technical management and direction of the Internet. The IETF and ISOC are responsible for the technical management and direction of the Internet. The IETF and ISOC are responsible for the technical management and direction of the Internet.
they only want to know how they’ll be affected. So, here are highlights of the networking future.

New Standards Protocols

When I was talking about how the Internet started, I mentioned the Xerox Standards Organization (ISO) and their set of protocol standards. Well, they finally finished designing it. Now it is an international standard, typically referred to as 'TCP/IP', which is the System/OSI (Open Systems Interconnect) protocol suite. Many of the Internet's component networks use allow of OSI today. These new standards mean that the U.S. government has taken a position that government computers should be able to speak these protocols. Many have the software, but few are using it now.

It really unclear how much demand there will be for OSI, notwithstanding the government backing. Many of the current approach isn’t broke, so why fix it? They are just becoming comfortable with what they have, why should they have to learn a new set of commands and terminology just because it is the standard?

Currently there are no real advantages to moving to OSI. It is more complex and requires more processing power than IP, and since the networking doesn’t operate efficiently, OSI does offer hope of some additional features, but it also suffers from some of the same problems that the Internet will get, much bigger and faster. It’s clear that some sites will convert to the OSI protocols over the next few years. The question is how many?

International Connections

The Internet has been an international network for a long time, but it only extended to the United States allies and overseas military bases. Now, with the less paranoid world environment, the Internet is spreading everywhere. It’s currently in over 50 countries, and the number is rapidly increasing. Eastern European countries long for western scientific ties have wanted to participate for a long time, but were excluded by government policies. China, for example, is now connected. Third world countries that formerly didn’t have the means to participate now view the Internet as a way to raise their education and technology levels.

In Europe, the development of the Internet used to be hampered by national policies mandating OSI protocols, regarding it as a cutthroat threat akin to EuroDisney. These policies prevented development of large scale Internet infrastructures except for the Scandinavian countries which embraced OSI policies. Western scientific ties have wanted to participate for a long time, but were excluded by government policies. China, for example, is now connected. Third world countries that formerly didn’t have the means to participate now view the Internet as a way to raise their education and technology levels.

At present, the Internet’s international expansion is hampered by poor supporting infrastructure, namely a decent telephone system. In both Eastern Europe and the third world, a state-of-the-art telephone system is nonexistent. Even in major cities, connections are limited to the speeds available to the average home anywhere in the U.S., 9600 bits/second. Typically, even more, your best chance of connecting to the Internet, only a few sites are accessible.

Usually, this is the major technical university for that country. However, as phone systems improve, this will all change too. More and more, you’ll see smaller sites (even individual home systems) connecting to the Internet.

Commercialization

Many big corporations have already been on the Internet for years. For the most part, their participation has been limited to research and engineering departments. The same corporations used some other network (usually a private network) for their business communications. After all, the Web was an academic research project. The IBM mainframes that handled their commercial data processing did the “real networking” using an advanced specifications called System Network Architecture (SNA).

Businesses are now discovering that running multiple networks is expensive. Some are beginning to look to the Internet for “one-stop” network shopping. They were scared away in the past by policies which excluded or restricted commercial use. Many of these policies are under review and will change. As these restrictions drop, commercial use of the Internet will become progressively more common.

This should be especially good for small businesses. Mothball or Solaris Quality and Solaris could avoid one of their problems, but Ace custom software couldn’t. If Alice has a San Jose office and a Washington office, all it needs is a Solaris connection on each end. For all practical purposes, they have a nationwide corporate network, just like the big boys.

Privatization

Privatization and commercialization come privatization. For years, the networking community has wanted the telephone companies and other for-profit networks to offer the Internet to the general public, but nobody wanted to provide it to the public. That is, just like you can place an order for a telephone jack in your house for your telephone, you could do this for an Internet connection. You order, the telephone installer leaves, and you plug your computer into the Internet. Except for Bolt, Banek and Newman, the companies that ran the ARPANET, there aren’t any anymore. The telephone companies have historical, said, “We’ll sell you phone lines, and you can do whatever you like with them.” By default, the federal government stayed in the networking business.

Now that large corporations have become interested in the Internet, the phone companies are now trying to change their image so that they and other profit-oriented network purveyors claim that the government ought to get out of the networking business. After all, who best provides for the needs of the network services but the “phone companies”? They’ve got the ear of a lot of political people, to whom it appears to be a reasonable thing. If you talk to one of their company personnel, many of them still don’t really understand what the Internet is about. They ain’t got religion, but they are study- ing it. A lot of companies are trying to educate those telephone company employees who saw the eight years and have been trying to drag their employees into church.

Although most people in the networking community think that privatization is a good idea, there are some obstacles in the way. They revolve around the funding for the connections that are already in place. Many schools are connected because the government pays part of the bill. If they had to pay their own way, some of those schools quite probably would have dropped the project. Money elsewhere. Major research institutions would certainly stay on the net, but some smaller colleges might not, and the costs probably would have to go.
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I had to take a moment here to talk about something which, particularly in the present atmosphere, we would all probably rather not even think about anymore. Smoking. Yeah, I do mean cigarette smoking. I know that there must be among you representatives from every country and every part of the world. Why must I, too, baffle about it when we are already swimming in a sea of propaganda regarding it? Well, what can I say. I’m just putting in two cents for my fifteen measly minutes of opinionated rambling and in doing so, the lecture will come up sooner or later. So I’ll give it one more and get it over with.

Now, we all know from our previous grade school history books that the act of smoking is an American tradition. Hell’s Belt’s the pipe and the meridian of things with which to pack it practically came with the territory. For both the peace-making American Indians and the U.S. Presidents who turned around and enslaved them, hemp and tobacco were staple crops. Little did either know the seeds that they were planting would prove to be too difficult to uproot.

I have no problem with hemp (marihuana) except for its legal status, so what I’m focusing on is the tobacco variety of smoke. We all know by now what cigarette smoking does, don’t we? I don’t want to be redundant but, for those of you who live in a box with no contact with the outside world save for Flipside, let it be stated that every form of internal involvement with tobacco products can produce terminal cancer in little critters like...US! So why do so many of us do it?

Even now, as I write about it, I feel myself becoming so overcome with both my conviction and anxiety that I am compelled to reach for a cigarette. And hey, I’m a smart person, fully aware of the risk I am taking and all its’ consequences, but I do it anyway. I must admit that I even rather enjoy it. In the ten years that I’ve been smoking, I have never once even tried to quit. I have to wonder about that. After all, smoking is the most self-destructive activity a person can habituate. It destroys with deadly force, and that destruction is absolute. It is also one of the few things in society that is perfectly legal and almost universally accepted.

Why do we do it in the face of all the damn good reasons not to? My friend Dee, who does not smoke, recently shared with me an interesting observation she had made about it. She noticed that “when smokers are talking to non-smokers, about difficult stuff, they are likely to pull out a cigarette. This is because smoking a cigarette requires one’s attention and is time-consuming, like a mini-hourglass. By smoking a cigarette during a conversation, it creates a situation in which both sides can maintain eye contact. It’s a way to manage the situation. It’s like a ‘time-out’ method to administrate a conversation.”

In the home however, concentrated DMT can be effectively administered by smoking or injecting it. DMT is most efficiently smoked through a glass pipe with a small air chamber or, if you can get hold of one, a classic DMT pipe. Trying to smoke it through anything else can be so difficult and wastage so much of the precious substance that it hardly worth it. A tiny amount (about 30 milligrams) is sufficient to kick in the most unbelievable colors and images. Moderate, even lighting is preferable to bright or low light in order to really appreciate the complex patterns which weave themselves throughout your visual field. The entire experience lasts a total of about 5-10 minutes with a calm, mellow after-effect which lingers for about 20 minutes after that. So do try it, use this 20 minute period to make notes on your experience, while the impression is still fresh in your memory.

NOTE! Although small amounts of DMT have been found to occur naturally in many plants and and beasts - humans included, and there is a very low toxicity level for it, DMT is still a very powerful psychedelic. I wouldn’t recommend it to anyone’s first experience with psychedelics and, as always, the individual in question should be aware of the nature of the drug and have some idea about what to expect. I also think that it is a good idea to refrain from doing DMT while under the influence of other drugs or medication, at least not until you’ve read up on the possible risks. I recommend you get hold of anything by Gracie & Zavorka (try to get hold of “The Gracie & Zavorka Reader”), it has a lot of interesting anecdotal information and is fun reading, too. It’s not easy to find in a regular bookstore, but you may be able to obtain a copy of it. Al & I both enjoyed it. They were students at Mondo 2000’s forum, High Frontiers. Pick up any old copies of that magazine you come across, it’s terrific. Or try to write to R.U. Sirius at Mondo, there might be back issues available and it was his magazine. Of course, Peter Stafford’s Psychedelic Encyclopaedia is also an invaluable resource when you decide to delve into any drug research of your own. Again, DMT is a very heavy psychedelic for the serious inner-stellar travel, not the Sunday driver. And please be wise enough to employ a friend whom you trust to accompany you. No one should ever take a drug they don’t fully understand. The consequences could be a real drag. Also, keep in mind that DMT and many other psychedelics are currently on Schedule 1 with the DEA & FDA, which means that there are nasty legal penalties attached to them.

Some notes on a DMT experience are as follows:

With eyes closed, it’s really trippy...some very psychedelic but not the personal three-dimensional, intoxicating fantasy shapes/patterns of incredible beauty & intense color transformed themselves all around me. I felt like I wanted to look around or say something but it was useless to even try. Finally, I focused my vision on one moving, glowing point. I now knew I was on the third floor of a huge black diamonds in the center. Once I had settled on this part of the image, the whole thing became very beautiful although I was struck by the lack of emotion I felt generated by the experience. It felt like some kind of timeless, permanent, and yet familiar space, though it was not entirely pleasant. There were those machine-like twirling color wheels spinning all around me, seemingly aware but indifferent. Were they laughing? I remember thinking the same question which had occurred to me the last time I had taken this stuff, “Is this what you asked for, is this what you wanted?” Well, no. It wasn’t exactly what I had expected. It was kind of scary, actually. Although I didn’t feel like I was in a great mood at all, the whole vibe from it was cold and uncomfortable. I was glad when it subsided. I had gotten a good hit, too. Between 30-40mg.

But was that really the “light”? I don’t think so (shudder to think). The whole thing just seemed to be devoid of meaning. Beyond being like a virtual reality kaleidoscope it seemed very superficial. Ah, everyone’s a critic, I know. But I’ve seen something like the “cryptanshum” when I have stared too long at the sun through my closed eyelids. I think the description of it sounds much cooler than the experience itself actually is, at least in this case anyway. I also think that perhaps the reason it seemed so “familiar” to me is because of the fact that I had experienced something similar to it on larger doses of acid. Then again, a large dose of acid for me is like five or six 10mg.

I read and heard that DMT- Land was an “inhabited world”. Personally, I am hard pressed to call what I saw “inhabited”, though it was definitely moving. Unfortunately, my friend didn’t hold in enough of the smoke (which smells atrocious, like burning rubber and rotten eggs) to get that much impression or correlate with my vision. I can say with certainty, however, that on no occasion have I encountered T. McKenna’s “machine eyes”, Gracie’s “language kittens”, or anything like “DMT” manifestions. But, seeing as I have only tried it on three rare occasions, I certainly haven’t ruled that out as being impossible or nonexist-
Did everybody go out and plant morning glory like you were instructed? Good. Now this time we're gonna talk about potentiating your psychedelic experience by slightly altering your body chemistry. How are we gonna do that? Well, it's very tricky, and very dangerous. But a lot of fun.

Karrt mentioned the use of MAO inhibitors and that's what we're gonna do, interfere with the protective function of monoamine oxidase. This enzyme function is to break down physiologically active amines such as dopamine, serotonin, noradrenaline and render them inactive. If we block the function of this enzyme we'll build up these active neurotransmitters, increasing action at their receptors, and, of course, inducing hallucinogenic effects. The danger here is two fold. First, MAO is indeed important to our normal functioning, so you don't want to knock it out for very long. There are a lot of commercial MAO inhibitors on the market, and their action can be in effect for days or even weeks! They can be very strong and possibly lethal! Even the short term inhibitors discussed here can potentially fuck you up big time. There's a good account in Terrance McKenna's "The Overseer" of his brother, Dennis, knocking out his MAO system and remaining on a three week mushroom trip! Be warned! The other danger with this stuff is that although it potentiates neurotransmitters, it also detoxifies tons of other things - like various drugs (especially amphetamines, where the wrong combination can lead to anywhere from enhancement, to a hypertensive crisis, to death) and alcohol and chemicals you ingest in your food. So unless you know what you're doing (read AA meetings all over the country) I don't recommend the use of MAO inhibitors in the inhibited state. Otherwise you are asking for trouble. You get the picture, this is serious stuff, but then again if you didn't take drugs seriously you wouldn't be reading this column, would you?

On the brighter side, it is believed by some that as we grow older our body maintains more and more MAO - essentially keeping us very grounded and shielded from potential dangers of the neurotransmitter. This may manifest itself as a loss or weakening of creative abilities, youthful imagination or daydream fantasies. In this case, maybe a little MAO inhibition is just what you need.

Now, more to the point, the particular MAO inhibitors I'm gonna talk about today are known as Betas- Carbolines. Harmane and harmaline (and related variations such as harmalol, harman, tetrahydroharmine etc.) have been used in various cultures since time began. The most noted source of harmine (and its relatives) is from a plant native to the Middle East, Peganum harmala, or Syrian Rue. Some people consider the use of this plant central to Middle Eastern religious beliefs (as the sacred nebran "Boma") as well as the basis for the "flying magic carpet" myths. Syrian rue is in fact used as a dye, the yellow extract from the seeds being rich in the carbolines of this article (up to 3% in the seeds), and if one were to soak their hands in it all day as in dying huge Syrian rugs, then maybe those rich MAO inhibited state and fly off on their own "magic" carpet?

In South America these carbolines have also had extensive usage in another sacred nebran called ayahuasca. The native peoples use it to trigger Hallucinogenic plants and the carbolines containing Ayahuasca vine, Banisteriopsis caapi to induce a visionary state in their rituals. The active alkaloid in Caapi when first isolated was given the name "Caapi", and it was found to be exactly the same as the harmine of the Syrian rue.

Although you'll probably never get your hands on any Caapi, and even though Syrian rue is native to the middle east, it has been introduced in the United States. It reportedly grows in Texas and New Mexico. If you live there you should definitely get a good botanical guide and seek out this marvelous plant. In California, how-