# Nástroje a možnosti internetu

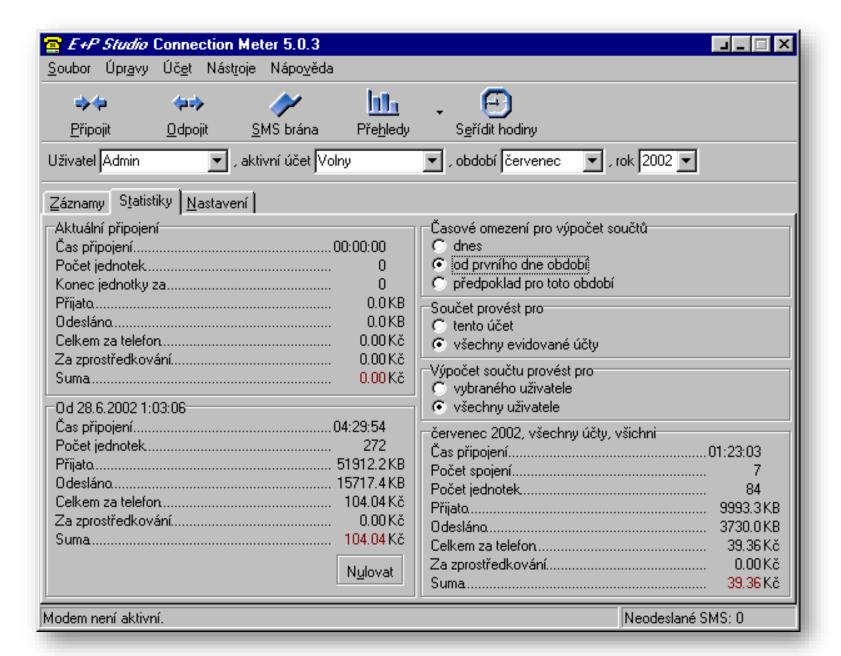
Úvodní organizační hodina 27. 9. 2024

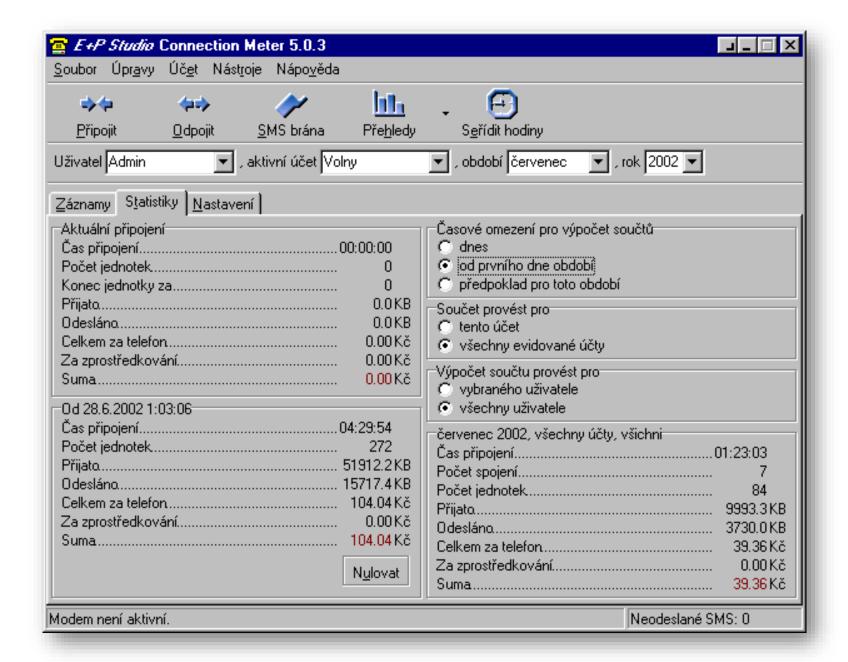
# Kontakty

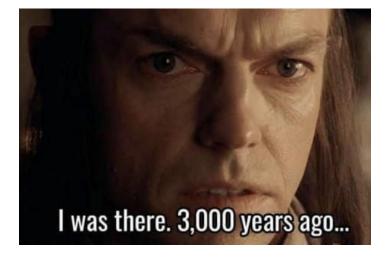
- Tomáš Marek
- marek@kisk.cz

- na internetu poprvé v roce 1997
- stabilně od roku 2000+









V kterém roce (zhruba) jste poprvé pracovali s internetem?



Fig. 1. Source: HCMST 2009 and HCMST 2017 waves. Consistent with Rosenfeld and Thomas (3), all trends are from unweighted Lowess regression with bandwidth 0.8 (39), except for meeting online, which is a 5-y moving average because meeting online takes place in the more recent and data-rich part of the data (N = 2.473 for HCMST 2009 and N = 2.997 for HCMST 2017). Friends, family, and coworkers can belong to either respondent or partner. Percentages do not add to 100% because the categories are not mutually exclusive; more than one category can apply.



### Disintermediating your friends: How online dating in the United States displaces other ways of meeting

Edited by Andrew J. Cherlin, Johns Hopkins University, Baltimore, MD, and approved July 30, 2019 (received for review May 23, 2019)

were bestored and not a studioscally depresent and the control of declined over time. We find that Internet meeting is displacing the roles that family and friends once played in bringing couples

rom the end of World War II until 2013, the most popular way heterosexual Americans met their romantic partners was • way neterosexual Americans met their romanue partners was through the intermediation of friends. One's close friends and family have, probably since the beginning of time, been the essen-tial network foci that enable connections to other people, i.e., the friends of one's friends (1). More distant ties have the potential to rinense of one streenes (1), wore distant uses have the potential create a bridge to a new, previously unknown network of people and information (2). Friends, the close and the not-so-close, have been historically a crucial source of connections to others. The rise of the Internet has allowed individuals in the dating market rise of the interiet has an own thorottons in the dating market to disintermediate their friends, i.e., to meet romantic partners without the personal intermediation of their friends and family. Rosenfeld and Thomas (3) with data from 2009 showed that

the percentage of heterosexual couples\* who met online had risen from 0% for couples who met before 1995 to about 22% for couples who met in 2009. In the 2009 data, Rosenfeld and Thomas showed that meeting online had grown but was still significantly behind friends as the most prevalent way heterosexual couples met. Furthermore, the 2009 data appeared to show that the rate of meeting online had plateaued for heterosexuals at around 22%. In this paper, we present data from a nationally representative 2017 survey showing that meeting online has continued to grow for heterosexual couples, and meeting through friends has continued its sharp decline. As a result of the continued rise of meeting online and the decline of meeting through friends, online has become the most popular way heterosexual

couples in the United States meet. couples in the United States meet.

It was not inevitable that the percentage of heterosexual couples who met online would have continued to grow beyond the previously documented 2005 to 2009 plateau. Unlike gays and lesbians, heterosexuals can assume that most people they meet are heterosexuals also. Heterosexuals, because they constitute the large majority of adults, are usually in thick dating markets. where several potential partners are identifiable. The theorized advantage of face-to-face contact (4) could have limited the growth of online dating.

The traditional system of dating, mediated by friends and fam-

ily, has long been theorized to be optimal for mate selection. The family system is historically predicated, in part, on catalyzing and promoting the most socially acceptable mating outcomes for the younger generation (5). Meeting through friends and family pro-

We present data from a nationally representative 2017 survey of Despite the traditional advantages of meeting face-to-face

Research on communication technology's impact on social relations finds that technology is more likely to change the effi-ciency of interactions than to change who interacts with whom (9). The broad dissemination of land line telephones in the United States in the early 20th century made it easier for Ame Offices states in the carry 2nn contains made it easier for Americans to stay in touch with relatives from out of town, but it did not change who interacted with whom. Most telephone calls were made to people one already knew (10).

If communication technology reinforces and complement existing face-to-face social networks, hierarchies, and patterns

(11–13), then we would expect any rise in Internet dating to rein-force rather than to displace the traditional roles of friends and family as introducers and intermediaries. Online social networks like Facebook allow friends and family to do (more efficiently mke Facebook allow friends and family no do (more enticently what friends and family have always done: facilitate (potentially romantic) direct ties between people who are already connected to the same social network. Even infrequently seen friends can be easily introduced to each other online. Research on technolne easily introduce to each other of mine. Research on technology as reinforcing existing face-to-face social ties leads to our Hypothesis 2: any rise in Internet dating will reinforce rather than displace the intermediary roles of friends and family. There are many critics of Internet dating and computer-mediated communication (CMC) more generally. Some scholars

friends as the main way heterosexual couples in the United States meet. Traditional ways of meeting partners (through family, in church, in the neighborhood) have all been declin-

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To whom correspondence may be addressed. Email: propented bytanford as

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### THE PRESS

" Nihil utile quod non honestum."

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SATURDAY, JUNE 13, 1863.

PUBLISHED DAILY-PRICE 3D.

MR DOBSON.

well as guide the ship's course, can rightly appro- to district boards. The great change thus effected prototypes of the race.

would have been abolished in the Public Works CHRISTCHURGH. hal a fendency to estimate works rather over than a Society intend to celebrate the event by two consults their full value. All labovers do and ought to nake much higher wages on piece or content of the full value. For some than a labour, and their said the some than the content of the society of the soci money to be paid for work than it would have cost a crowded one. had it been done by an ordinary employer.

As the colony became richer we have always thought that the Engineer gradually grew into state wired, that his daties became more administrative than use described with any public servant and taking a sent in the legislative body. In fact a large-strate times the public works greer to such a imposited but they were fix to come the metal-strate times the public works greer to such a imposited but they were fix to come the date that the control of the Porticulal Connell. We are sufficiently obvious a core present to decrease in the control of the Porticulal Connell. We are sufficiently obvious a core present to decrease the date to describe the control of the Porticulal Connell. We are sufficiently obvious a core present of the section of the strain and the control of the porticular connells to the tendence of the strain and the control of the porticular connells and the strain and the control of the one of the strain and the control of the one of the strain and the control of the strain and the

Our opinion of this subject has been often and human race. If we revert to the earliest of the greatest and most mysterious questions of freely expressed. We entirely hold with the primordial types of nuccinatical life, to the lever, the day. We refer to the question what sort of We cannot take leave of Mr. Dokson as the Pro-report of the Committee of the Provincial Consoil, the wedge, the inclined plane, the server, and the We common the communities of the Provincian Common, the wedge, the medical plane, the server, and the creature man's next successor in the supremater of in which they pointed out that the present system pulley, or (for analogy would lead us one step the carth is likely to be. We have often heard in whom may pomere out that me present system pomery, or (or manage woman and one only and in past services than we have yet made, at his past services than we have yet made ought not to be continued my longer. We further) to that one primordial type from which this debated; but it appears to us that we are of in pass a service upon the property of the continued my longer. We further) to the menined high point one primordial type from which this debated; but it appears to that we are until in 1835, to by out the briller-road from please to Alarson. The effective and astistance is until in 1836, and a control growing waker and worker, we man to the lever shell, and if we then examined of substances in the primary of the primary to Alarson. Figure to Alarea. The effective and satisfactory manner in which he performed this dudy, making a manner in which he performed this dudy, making a complete helder of the treatment of the department of the department of the properties of the department of the properties and the magnitude of the operations of the department of the machinery of the Great Enteron, we find our or orderly gring them a complete helder of the treatment of the machinery of the Great Enteron, we find our or orderly gring them a complete helder of the contract of somplete hetch of the route through a demo
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ciate how much work Mr. Dobson got through may be described as a change from monopoly to We regret deeply that our knowledge both of takes," these will be entirely unknown to them. with very inadequate resources; for in those free trade—the monopoly of all the engineering natural history and of machinery is too small to If they want "feeding," (by the use of which very days the Engineer was his own Clerk of the work of the province in the hands of one Government enable us to undertake the gigantic task of class word we betray our recognition of them as living Works, and in a measure his own pay clerk too. ment officer, or free trade in engineering ability. sifying machines into their genera and subgeners, organisms) they will be attended by patient slaves Perhaps no man has been, on the whole, from It cannot be doubted that under such a policy the species, varieties, subvarieties, and so forth, of whose business and interest it will be to see that time to time more unpopular than the late Proviscal Engineer. Where every one wanted increased, as supply is always stimulated by widely different characters, of pointing out how order they will be promptly attended to by every thing done at once; and to undertake one demand, and the public would be the guiners subservience to the use of man has played that physicians who are thoroughly acquainted with work was to offend a host of claimants interested every way. Mr. Dobron was the first Provincial part among machines which natural selection has in works in different parts of the province, Engineer, and we hope he may be the last. We performed in the animal and vegetable kingdoms, glorious animals will not be exempt from that most persons sooner or later had occasion to hope, instead of seeing one Provincial Engineer, of pointing out rudimentary organs, [see necessary and universal consummation, they will grumble at the Provincial Engineer. But it is to see a separate Engineer for each district, and note] which exist in some few machines, immediately enter into a new phase of existence, oaly fair to say that if unsparing labor would the great bridges and railways given to those who feebly developed and perfectly useless, for what machine dies entirely in every part a

### Correspondence.

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The New Harden States in the Johnson of the state in the state of the state in t

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ony ian' to say that if unsparing labor would have done everything at once, time and space would have been abolished in the Public Works department. Another feature in Mr. Dobson's official life was this, that, in all except very rare cases, the public works were done within his estimates. It is true, on the other hand, that he had a tendency to estimate works rather over than under their full value. All laborers do and ought to make much higher wages on piece or contract work than on time labour, because they put more hard work into the job; but it requires very clear judgment to estimate the value of contract work, calculating it at the current rate of wages of the day, allowing for a fair and honest day's work being done by each man. There can be no doubt that Mr. Dobson has in many cases allowed much more money to be paid for work than it would have cost had it been done by an ordinary employer.

As the colony became richer we have always thought that the Engineer gradually grew into the position of a Minister of Public Works; in other words, that his duties became more administrative than was desirable with any public servant not having a seat in the legislative body. In fact in recent times the public works grew to such a magnitude that they were far too much under the control of the Engineer, and far too little under the control of the Provincial Council. We are not accusing Mr. Dobson of having aimed at this; it was the inevitable result of his position.

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### CHRISTCHURCH.

THE NEW MUSIC HALL .-- We desire to call the attention of our readers to the opening of the New Music Hall in Gloucester-street. An advertisement in our columns announces the pleasing fact that the members of the Canterbury Musical Society intend to celebrate the event by two concerts, on Monday and Tuesday next. It is a pleasing feature in the case to be enabled to add that Messrs. Poussard and Douay, and their assistants Messrs Wilkinson and Beaumont, have also offered their valuable aid to give celat to these concerts. The room is the largest, and for the transmission of sound, beyond doubt the finest in the Province, and great credit is due to the enterprising proprietors who have at last supplied a Hall so long needed to give effect to the musical talent of the city. We hope, nay, we are sure, that although at so short a notice the Hall will be a crowded one.

### Correspondence.

DARWIN AMONG THE MACHINES.

TO THE EDITOR OF THE PRESS.

Sir,—There are few things of which the present generation is more justly proud than of the wonderful improvements which are daily taking place in all sorts of mechanical appliances. And indeed it is matter for great congratulation on many grounds. It is unnecessary to mention these here, for they are sufficiently obvious; our present business lies with considerations which may somewhat tend to humble our pride, and to make us think seriously of the future prospects of the

yet serving to mark descent from some ancestral type, which has either perished or been modified into some new phase of mechanical existence. We can only point out this field for investigation; it must be followed up by others whose education and talents have been of a much higher order than any which we can lay claim to.

Some few hints we have determined to venture

upon, though we do so with the profoundest diffidence. Firstly, we would remark that as some of the lowest of the vertebrata attained a far greater size than has descended to their more highly organized living representatives, so a diminution in the size of machines has often attended their development and progress. Take the watch for instance. Examine the beautiful structure of the little animal, watch the intelligent play of the minute members which compose it; yet this little creature is but a development of the cumbrous clocks of the thirteenth centuryit is no deterioration from them. The day may come when clocks, which certainly at the present time are not diminishing in bulk, may be entirely superseded by the universal use of watches, in which case clocks will become extinct like the earlier saurians, while the watch (whose tendency has for some years been rather to decrease in size than the contrary) will remain the only existing type of an extinct race.

The views of machinery which we are thus feebly indicating will suggest the solution of one

n some one and the same instant?

We take it that when the state of things shall have arrived which we have been above attempting to describe, man will have become to the machine what the horse and the dog are to man. He will continue to exist, may even to improve, and will be probably better off in his state of domestication under the beneficent rule of the machines than he is in his present wild state. We treat our horses, dogs, cattle and sheep, on the whole, with great kindness, we give them whatever experience teaches us to be best for them, and there can be no doubt that our use of meat has added to the happiness of the lower animals far more than it has detracted from it: in like manner it is reasonable to suppose that the machines will treat us kindly, for their existence is as dependent upon us as ours is upon the lower animals. They cannot kill us and eat us as we do sheep, they will not only require our services in the parturition of their young, (which branch of their economy will remain always in our hands) but also in feeling them, in setting them right if they are sick, and burying their dead, or working up their corpses into new machines. is obvious that if all the animals in Great Britain save man alone were to die, and if at the same time all intercourse with foreign countries were by some sudden catastrophe to be rendered perfectly impossible, it is obvious that under such

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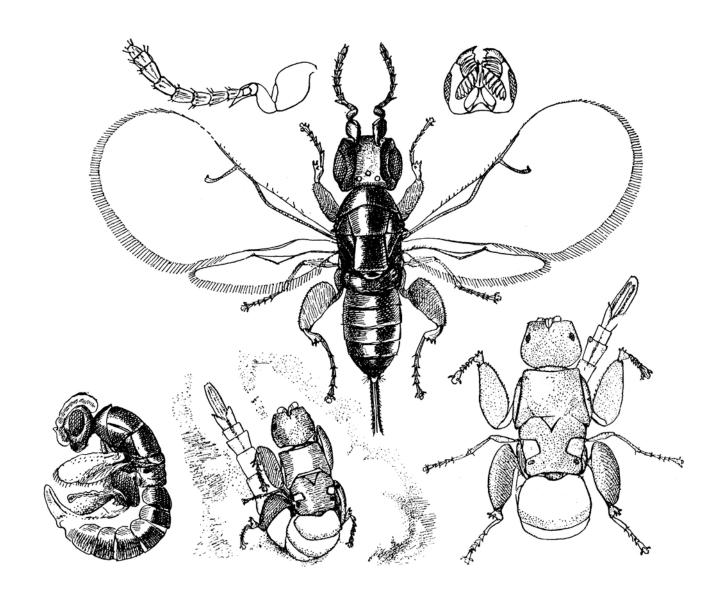
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Vezměte si například hodinky. Prohlédněte si krásnou stavbu tohoto malého zvířátka, sledujte inteligentní hru drobných článků, z nichž se skládá; a přesto je tento malý tvor pouhým vývojovým stupněm těžkopádných hodin ze třináctého století - není to žádné jejich znehodnocení. Může přijít den, kdy hodiny, jejichž množství se v současnosti jistě nezmenšuje, budou zcela vytlačeny všeobecným používáním hodinek; v takovém případě hodiny vymřou stejně jako dřívější sauři, zatímco hodinky (jejichž velikost se již několik let spíše zmenšuje, než aby tomu bylo naopak) zůstanou jediným existujícím typem vymřelé rasy.



### I. Introduction

### A. Symbiosis

HE fig tree is pollinated only by the insect Blastophaga grossorum. The larva of the insect lives in the ovary of the fig tree, and there it gets its food. The tree and the insect are thus heavily interdependent: the tree cannot reproduce without the insect; the insect cannot eat without the tree; together, they consitute not only a viable but a productive and thriving partnership. This cooperative "living together in intimate association, or even close union, of two dissimilar organisms" is called symbiosis.<sup>1</sup>

### Man-Computer Symbiosis\*

J. C. R. LICKLIDER†

Summary-Man-computer symbiosis is an expected development in cooperative interaction between men and electronic computers. It will involve very close coupling between the human and the electronic members of the partnership. The main aims are 1) to let computers facilitate formulative thinking as they now facilitate the solution of formulated problems, and 2) to enable men and computers to cooperate in making decisions and controlling complex situations without inflexible dependence on predetermined programs. In the anticipated symbiotic partnership, men will set the goals, formulate the hypotheses, determine the criteria, and perform the evaluations. Computing machines will do the routinizable work that must be done to prepare the way for insights and decisions in technical and scientific thinking. Preliminary analyses indicate that the symbiotic partnership will perform intellectual operations much more effectively than man alone can perform them. Prerequisites for the achievement of the effective, cooperative association include developments in computer time sharing, in memory components, in memory organization, in programming languages, and in input and output equipment.

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machine systems." There are many man-machine systems. At present, however, there are no man-computer symbioses. The purposes of this paper are to present the concept and, hopefully, to foster the development of man-computer symbiosis by analyzing some problems of interaction between men and computing machines, calling attention to applicable principles of man-machine engineering, and pointing out a few questions to which research answers are needed. The hope is that, in not too many years, human brains and computing machines

will be coupled together very tightly, and that the resulting partnership will think as no human brain has ever thought and process data in a way not approached by the information-handling machines we know today.

### B. Between "Mechanically Extended Man" and "Artificial Intelligence"

As a concept, man-computer symbiosis is different in an important way from what North2 has called "mechanically extended man." In the man-machine systems of the past, the human operator supplied the initiative, the direction, the integration, and the criterion. The mechanical parts of the systems were mere extensions. first of the human arm, then of the human eye. These systems certainly did not consist of "dissimilar organisms living together . . . " There was only one kind of organism-man-and the rest was there only to help

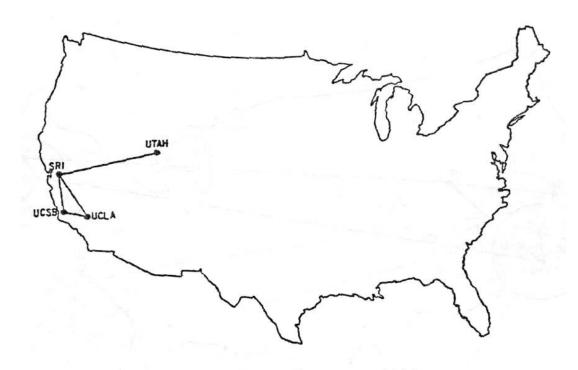
In one sense of course, any man-made system is intended to help man, to help a man or men outside the system. If we focus upon the human operator(s) within the system, however, we see that, in some areas of technology, a fantastic change has taken place during the last few years. "Mechanical extension" has given way to replacement of men, to automation, and the men who remain are there more to help than to be helped. In some instances, particularly in large computer-centered information and control systems, the human operators are responsible mainly for functions that it proved infeasible to automate. Such systems ("humanly extended "Man-computer symbiosis" is a subclass of man-machines," North might call them) are not symbiotic systems. They are "semi-automatic" systems, systems that started out to be fully automatic but fell short of

> Man-computer symbiosis is probably not the ultimate paradigm for complex technological systems. It seems entirely possible that, in due course, electronic or chemical "machines" will outdo the human brain in most of the functions we now consider exclusively within its province. Even now, Gelernter's IBM-704 program for proving theorems in plane geometry proceeds at about the same pace as Brooklyn high school students, and

It seems reasonable to envision, for a time 10 or 15 years hence, a "thinking center" that will incorporate the functions of present-day libraries together with anticipated advances in information storage and retrieval and the symbiotic functions suggested earlier in this paper. The picture readily enlarges itself into a network of such centers, connected to one another by wide-band communication lines and to individual users by leased-wire services. In such a system, the speed of the computers would be balanced, and the cost of the gigantic memories and the sophisticated programs would be divided by the number of users.

# Stručná geneze

- 1962 Galactic Network
- malé sítě, time-sharing
- přepojování okruhů
- DARPA 1967 ARPANET
- přepojování paketů
- TCP/IP



The ARPANET in December 1969

# Stručná geneze

- *UCLA-SRI* (1969)
- LOGIN
- "Hence, the first message on the Internet was 'LO'
  - as in 'Lo and behold!'. We didn't plan it, but we couldn't have come up with a better message: short and prophetic." Leonard Kleinrock



COMPANY ENGINEER IN CHARGE COMPUTER SERIAL NO. OPERATOR DOWNTIME PROBLEM & REMEDY 790et19 T. TRACH CAPTST RUNNING - TESTANG LINE 1750 TO UCSB - LINE IS OPEN SO B REG IS COUNTING ERRORS BUT SHOULD CEASE COUNTING IF TEL. CO. GETS LINE FIXED. CHARLEY PLEASE CALL BEN AT SRI! CONDED OP. PROGRAM SK 2900769 2100 FOR BEN BARKER BBV 22:30 LEONARD KLEINROCK 30 oct 69 1030 Stopped op prag Started Impist to trace line trouble on 76WI (4C5B) SDS-S-324 CUSTOMER SERVICE

) 30 March 1970

POLT BERANEK AND NEV CONSULTING DEVELOPMENT.

FLO

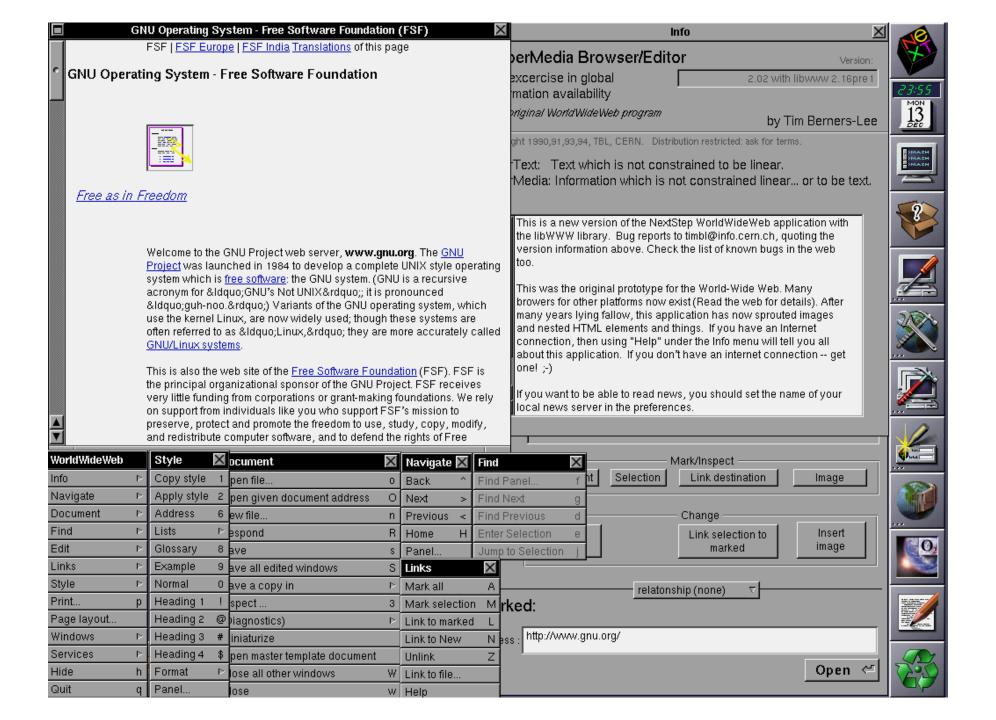
# Stručná geneze

- národní sítě, občasná mezinárodní spolupráce
- desítky let rozvoje technologií a protokolů
- budeme o nich mluvit, když to budeme potřebovat
- e-mail (Ray Tomlinson)



# Stručná geneze

- HTTP, HTML, URL (Gopher, ...)
- www web primární nástroj interakce na internetu
- Tim Berners-Lee
- pozdní 80 léta první ISP
- komerční využití (a "nadšení" vědců)
- TheWorld.com (1989)



# browser wars





# Put your computer in touch with the world.

AJ makes it possible for only \$185 with the A 242 acoustic data coupler.

Experts call it "the best acoustic coupler ever made." Reliability is phenomenalhistorically over 35,000 hours mean time between failure! Thousands are in use by companies all over the U.S.

And now, the A 242 from AJ, refurbished at the factory, can connect to your terminal or personal computer, putting you in touch with every other compatible terminal or computer. If you can telephone the site, you can send and receive data.

Bell 103/113 compatible, the originatemode A 242 features quartz crystal control, RS 232 or TTY terminal interface, and operational speeds up to 450 bps. At just \$185-about half the original price-it's a tremendous bargain. And you can have even greater savings with purchases of 10 or more units.

The A 242 carries our standard 30-day parts and labor warranty, and we're offering a no-risk, 10-day money-back guarantee\*

Call toll-free for details: (800) 538-9721. California residents call: (408) 263-8520.

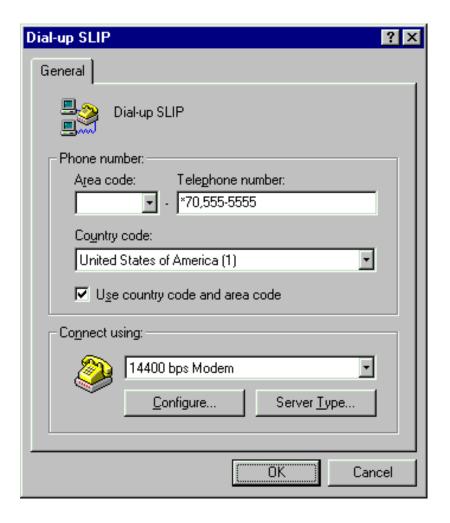
\*Details on request,

Prices subject to change without notice.

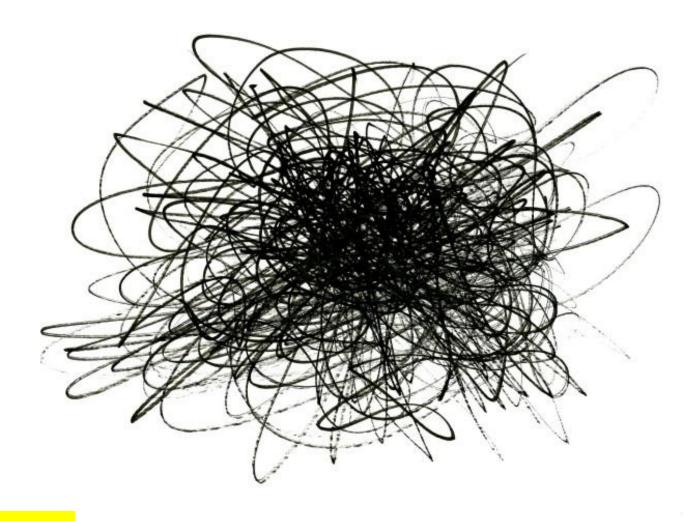
# OEFE ne e RÉOLPO

technikálie protokoly historický vývoj

osobní HLP-čka rituál připojení internet proti monopolu P2P sítě *(DC, BitTorrent)* 



# Co čekáte?



muni.cz/go/nami24

# Jak to pojmeme?

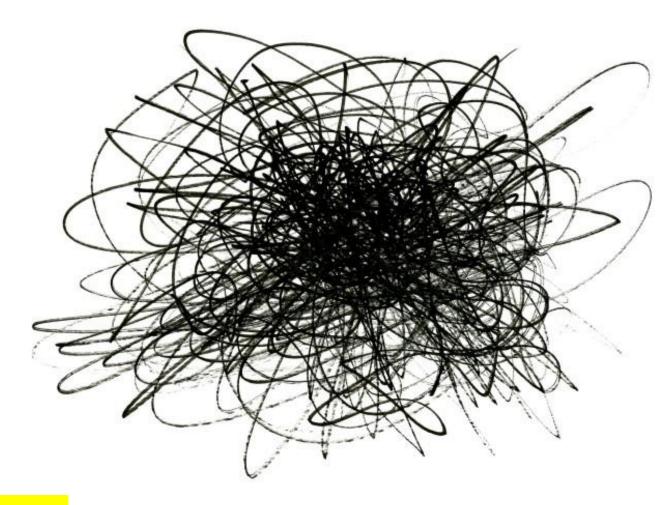
2005: Předmět si klade za cíl uvést studenty do problematiky využívání sítě Internet a dostupných služeb. Podrobněji se zaměřuje na některé aktuální problémy služby World Wide Web. Studenti si procvičí vytváření HTML dokumentů pro službu WWW.

# Jak to pojmeme?

- základy, teorie, problematika
- aktuální témata
- občasný nástrojový/technický přístup

- 2. Síťová neutralita
- → 3. Publikování na internetu
- → 4. Organizace webu
- ⇒ 5. Rekompozice a demetrikace
- → 6. Internet jako nástroj sledování I.
- → 7. Internet jako nástroj sledování II.
- 8. Hlubší vrstvy internetu I.
- → 9. Hlubší vrstvy internetu II.
- → 10. Remixovat, propojit, seškrábat

# Co vás zajímá?



muni.cz/go/nami24

# Požadavky na ukončení

- průběžné úkoly občasně mohou být
- · závěrečná esej a rozprava nad ní
- kostra předmětu je státnicová
- nástrojový Barcamp
- docházka

### P2P setkání!

# předvánoční NaMI barcamp

spolupráce!

decentralizovaná přednáška!

Jaké služby vám pomáhají v každodenní práci?
Na jaké (legální) weby chodíte a chcete je ukázat i ostatním? Jak vám Internet změnil život?
Co nejvtipnějšího jste s Internetem zažili?
Co nejhoršího se Vám na Internetu stalo? Jaké tipy a triky používáte na webu a chcete je naučit i ostatní? Pojďte to sdílet!

átastr nemovitostí - veřejný rejstřík citlivých údajů na internetu	1	
Prohlídka Vatikánského muzea aneb skvělý prokrastinační web		
Goodreads		
RG - Alternate Reality Game		
ínihovní mobilní aplikace		
lákupy (nejen) vánoční na internetu		
Imné umění umělé inteligence		
Bezpečné a anonymní online seznamování na příkladu Pure Ap	р	
OCUframe - i jak může vypadat email v dnešní době		
Grammarly		
Remix a spolupráce na evoluci memes: případová studie na Be	e movie	
lotion		
dyž nevím googlím		
Proč mám ráda personalizaci vyhledávání	F pro Ulož.to	
Proč je internet úžasné místo	Bílé stopy - když si chcete fakt dobře zaběžkovat  Arc Browser - nový způsob internetování	
lástroje pro kreativní a akademické psaní		
Pozitivní přínos blabla car v mykologické komunitě		
	Vánoce VS Internet	

Are we collecting for living of living for collecting?

## Jak to bude?

- MS Teams + prezenčně = hybridní výuka
- interaktivní osnova

# internet / Internet

- pravidla českého pravopisu
- obecná počítačová síť = internet
- celosvětová informační a komunikační síť = Internet
- v angličtině to tak jednoznačné není

# Domácí úkol



- A Declaration of the Independence of Cyberspace
- John Perry Barlow
- 1996 Communications Decency Act