Changes in Electronic Communications: What the User Figures for the New Communications Technologies aren't Telling us ...[x]

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Abstract: In the last few years, a shift in the way people use the so called "New Communication Technologies" has occurred. There is a development in the longitudinal dimension, where new user groups have emerged along with the emergence of these new technologies. Quantitative oriented research, the most prominent method being "Internet-surveys" published by media- and marketing-consultant agencies and broadly spread by the media, completely flattens such changes. But more subtle qualitative oriented studies do not reflect such changes either, since they often lack an historical dimension. This contribution outlines these new developments and would also like to correct some misunderstandings in connection with new "electronic communication" and to offer some communication-economic aspects.

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1. Preface

The effects of the new communications technologies on users or, if you will, their ramifications for consumers, have been subjects of analysis at the ITW of the Vienna University of Economics and Business Administration[1] (WU-Wien) in a somewhat unsystematic way since the end of the 1980s and continuously since 1994 when the first consumer-oriented study was conducted on these new communications technologies (cf. Karl KOLLMANN 1995). This paper will outline

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one aspect of this topic from a research-in-progress, namely the form modern communications take and a tentative answer to the question of whether the new communications technologies (here Internet-based technologies) improve the quality of communications, as is often asserted. [1]

After briefly tracing the development of the new electronic forms of communication, the author will discuss the problems encountered in analyzing these forms of communication and offer an initial tentative and time-based typology. [2]

2. The New Communications Technologies

The Internet began in Central Europe at universities in the early 1990s and started attracting broader attention from academic (European) researchers around 1993 or 1994. However, computer-based electronic communications was practiced years earlier. For example, mailbox systems via conventional phone lines (PC via modems or acoustic couplers) were available in many cities in Central Europe in the mid-1980s. The BTX system (interactive videotext) predated these systems by several years, functioning as a large nation-wide mailbox system, but failed to gain a significant foothold outside of France. [3]

The spread or use of new electronic forms of communication like Internet and mobile phone service has increased markedly since the mid-1990s. A major impetus for this broader use has come from the traditional media. Grassroots use of the Internet, in particular, has been pushed by political activists since 1995 in Europe and for several years longer in the United States. The user statistics vary greatly from source to source. Halfway realistic figures for 1998 estimated 7.3 million users in Germany, 1.1 million in Austria, 36 million in Europe, and 148 million worldwide. Mobile phones are utilized in the main by double those numbers of users (sources cf. KOLLMANN 1999). In the second half of the 1980s, there were probably no more than a few hundred thousand German-speaking users of mailbox systems and BTX. It should be noted that Internet-based forms of communication were already basically available in the German speaking countries during this period. In the near future, written forms of communication via Internet and mobile phone are expected to merge to an even greater extent than today (e.g. SMS [Short Message Service] and WAP access to the Internet from mobile phones). [4]

3. Types of Use and Motivations for Use

Use figures alone provide little help in answering the question as to why people opt for the new electronic forms of communication and what effects this use has on them and on everyday life. This question is not only an interesting one primarily for social scientists. It could also be an important peripheral condition politically, especially in relation to the active promotion of new technologies. [5]

Of course, the most fascinating aspect of the issue is the extent to which the spread of these technologies or techniques alters the behavior of their users and,

in turn, the spheres in which these users act and live. This is also of (consumer) economic interest because the use of these technologies incurs direct costs. Incidentally, one of the early predictions was that the new technologies, especially the Internet, would lead to a new culture of discussion, a culture both more communicative and more democratic—but first a brief look at some of the analytical problems involved. [6]

4. Problems Encountered in Quality Oriented Analysis

Recording the actual communication process is something researchers and observers can do in many communicative situations, but not with the new forms of communication. It was even extremely difficult in classic phoning. Privacy law prohibits listening in on phone calls except in certain prescribed situations and this type of monitoring would scarcely be practical anyway. Nor is correspondence by e-mail accessible as a matter of course. Chat observers only have access to a general superficial level of communication but not to conversations in "private rooms." It is much easier for observers to record conversations at local cafés or local bars and much less problematic to gain access to them. Despite these limitations, researchers can collect electronic documents of various kinds and have ready access to chats except for those taking place in "private rooms." [7]

But another problem also arises in observing changes in use behavior with electronic forms of communication. Conditions ten to fifteen years ago are no longer very accessible. This is because much of the early mailbox communication is not documented. For one, most users have switched machines several times in the meantime; the old 5 1/4 diskettes are often not even readable today. For another, the relatively early users of electronic communication are difficult to pinpoint today because they constitute such a small fraction of today's users. [8]

5. ... and in the Actual Research Process

Initially, the focus of research was focused on the contents and forms of private mobile phone communication. The basic issue was that relatively expensive mobile phone service must have some special significance for many people, otherwise this sector (and consumer outlays for it) would not be growing at such a rapid rate. This focus soon shifted to e-mail communication due to the problems outlined above. Anonymity can be maintained relatively easily in e-mails, which makes data collection easier, although there still are certain limitations. Upon perusal of some eighty e-mails collected from various sources, the author soon ascertained that they could be divided into two fundamentally different types: letter-like forms of communication and extremely brief messages issued as commands, greetings, warnings or the like. To achieve a selective sampling with regard to changes over time, data was collected from early forms of electronic communication and from corporate communication; chats were also recorded. This latter category was included in response to the frequently voiced objection

that the highly diverse chat rooms are a much more relevant forum of communication for modern private users than e-mail is.[2] [9]

6. Changes in Types of Use

Communicating electronically by sending e-mails to bulletin boards or to a dedicated addressee functioned in much the same way in the mailbox era (from the mid-1980's onward) as it does in the current Internet era (from the early 1990s onward). This type of communication has been described thoroughly and accurately in the classics on Internet culture. Howard RHEINGOLD is a paradigmatic example of such a description in a more journalistic style.[3] This communication style will be designated here for simplicity's sake as that of the "classic user." [10]

6.1 Classic use

This type of traditional communication still exists today. It is the type which emerged among early professional and semi-professional users—in particular at universities with their own Internet culture (= communications culture). Classic use presupposes the acceptance of a formal set of communication rules (netiquette) with elaborate discursive inputs that formally meet the sub-cultural requirements (e.g. suitable salutation, topical adequacy, signature). In terms of contents, there are no (mandatory) hierarchical structures to follow; on the contrary, communication is decidedly critical and acceptable as such, also as regards informal divisions of power. There were naturally also telegraph-style messages in classic use, but discourse was the norm. [11]

The techno-humanistic givens in early classic use involved being able to ask questions and express differing opinions (and being encouraged to do so; after all, the discussion either openly or implicitly desired thrives on such inputs). The emphasis was on developing trains of thought on different subjects and on "consumer empowerment"—e.g. the leveling of hierarchies and recourse to verbal argument. Core values of classic users include substantive communication of the type that was aimed for in the early days of electronic communications in academic communities in the United States and at the inception of the Internet and mailboxes and that recurred again in Europe with the introduction of the Internet. This was the norm and the objective. Of course, due to the reduced spectrum of written communication, (new) dimensions of gaining or holding or showing attention also became crucial, i.e. a humorous, concise writing style, summary and shifting lines of argumentation, a pointed style of language, inter-esting signatures, and autonomous response times (rapid-fire or slow and thoughtful). [12]

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2   The research is still in progress; the economical aspects of modern communication, in particular, will be elaborated upon in a Master's thesis just started and in forthcoming papers.

3   Cf. Howard RHEINGOLD (1994). For an early approach cf. Christoph CLASES (1994) or Volker KNEER (1994).

Of central importance here is that newcomers adapt to the formal media conventions which are more or less defined but which put no restrictions on contents and therefore open up great latitude in terms of how the discourse proceeds. [13]

Below is an example of this from a mailing list, i.e. one of the original forms of online communication: (This is a German-language example taken from a mailing list and has been rendered anonymous. It has the typical letter-like style of classic use but a translation would be of little relevance because of the unique stylistic features of the German and has therefore been dispensed with.)

> Hallo Listige,
>
> > N. N. created on aa.bb.1999 at cc:dd:ee following message:
> >>On Fri, ff G 1999 hh:ii:jj +0100, M. M. wrote:
>
> (...)
> >> Frag' mal die deutschen Datenschützer nach Kameras, die auf die
> >> Straße gerichtet sind ......
>
> >Fragt sich nur, ob die Datenschützer sich durchsetzen können ...
> Was bedeutet heute ueberhaupt noch der sog. "Datenschutz" und was koennten und wollen die Schuetzer durchsetzen? Sind die Datenschuetzer moralisch/rechtlich/politisch eine homogene Gruppe?
> Werden nur abstrakte Daten geschuetzt oder der wirkliche Mensch?
> Warum und wozu sind die Datenschuetzer in dieser Liste so still?
> Doch nun kurz zur "Videoueberwachung" am Beispiel des Hamburger Stadtteils:
> Z.B. koennte ich mir die Direktuebertragung von Videoaufnahmen in die einzelnen Haushalte sehr gut vorstellen, wenn es z.B. Strassenfeste oder Stadtteilversammlungen gibt, an denen einige Mitbewohner des Stadtteils nicht teilnehmen koennen, weil sie ggf. kranke/alte Menschen zu betreuen haben.
>
> Das haette dann aber nichts mit "Video_ueberwachung_", sondern mehr mit Teilnahme zu tun ...
>
> Aber in dieser Gesellschaft, in der die Kriminalitaet und "Innere Sicherheit"— verbunden mit Kontrolle, Polizeistaat und innerer Militarisierung gepusht wird, hat solch ein Videoprojekt "natuerlich" Ueberwachungsfunktion. Schade um diese Ressourcen, die darin destruktiv verschwendet werden.
> Gruss,
> Q.
>
> ---
>
> Wer schuetzt die Daten der Datenschuetzer?> [14]

In classic use, the substantive focus is on discourse, on cogent arguments. Of course, salutation, style, form, etc. lend a personal note in some cases,—but these elements tend to serve more as an attention-enhancing framework for the discourse in progress. Achieving effects or impressions is not the primary goal, it merely contributes to communication. [15]

6.2 Changes resulting from the spread of electronic communications

The spread of the new electronic forms of communication to latecomers among private "consumers" and "new professional users" has given rise to changes in how participants understand this form of communication. [16]

The major change is a shift in focus. Instead of viewing the new forms of communication as ways of opening up new or improved possibilities for communication, these latecomers see them merely as means of meeting existing communication needs. In other words, electronic communication is subordinated to subjectively set goals and not considered as a new goal in itself. This change has been all the easier because the new users (within organizations or as consumers) have come to these new forms of communication without any preconceptions about the traditions of classic use. For example, when Internet access is installed at a company, it is usually made available to employees without a "history of Internet use." The same holds true of private users. [17]

6.2.1 New types of use by consumers

When the telephone became an established feature of everyday life, it virtually replaced the tradition of letter writing in personal communications over distances. Traditional personal written communication plays only a minor role today except for certain special occasions (vacation postcards, greeting cards on holidays, documentary position papers, e.g. in preparation for legal disputes). The telephone has supplanted letters. [18]

Consumers use e-mail, of course, but the more important services are indisputably the WWW and chat. The WWW now offers a wealth of information, services and entertainment. The biggest sales (for non-gratis services) are still generated by erotically oriented sites. The various types of chat began drawing users relatively early on and are now much more visually enhanced. [19]

Whereas the WWW is akin to a multiple-channel TV, chats provide actual interactive communication rooms. They are comparable to a group of friends meeting for weekly coffee at a café or to a person having a drink at a local bar but differ in that they are limited to just written communication. [20]

Communicative forms suitable for making an interesting point, the short, concise, witty comments and "flirtatious" style that prove effective at an actual bar are also important in online chat to attract the attention of other participants. Competing to see who can make the "coolest" remarks is always a central feature of chat, whether physical or cyber. [21]

Here is an example from a chat to illustrate this point: (This German example is from a chat forum but is very difficult to render accurately in translation due to its many unique linguistic features, double meanings, alliterative phrases, etc. Anglo-American chats have other unique characteristics linguistically but are stylistically similar.)

(Bart77) kommt drauf an ob du m/w bist

(Guevara) test

> track verdünnt dann mal den Obstler für Nummer5lebt

> Nummer5Lebt winkt Tricia nach

0:11 Tricia verläßt den Chat

> lenchen lenchenis auch wieder da

> Guevara wartet auf kumpel

(knobby) track panscht!

(Yukimo) ICH BIN W

0:11 Guest1 betritt den Raum

(lenchen) hab ich was verpasst?

0:11 Monto schlendert aus dem Raum The_Greatest_of_all herein

(Guevara) die übertragung ist schon sehr langsam heute

(Yukimo) UND DU Bart

> track panscht immer knobby *g*

0:12 Irish betritt den Raum

(Janina29) Fatima versucht immer noch

(Yukimo) ok doofe Frage

(Guest1) Hallo ihr

(Guevara) hallo du

(lenchen) hallo du.

(knobby) dann will ich bei dir mineralwasser bestellen track

(Guest1) hi ihr beiden

(Guevara) lenchen ich war schneller*gg*

(lenchen) hallo du einer

> Nummer5Lebt verkraftet Tracks Input net *hickspäng*

(Guest1) eher hallo du eine

(Guevara) jetzt du

(lenchen) ja aber nicht vielmehr........

> track hat kein Minerale

(Guest1) nicht streiten

0:13 IronEagel betritt den Raum

(Guest1) woher seid ihr denn

(lenchen) mh

(Guevara) aus einer stadt

> IronEagel grüßt mal

(track) dann hat Nummer5lebt jetzt ein Problem *Arztruf*

(lenchen) genau

(Guest1) nein wirklich

(lenchen) doch

(Guest1) die da heißt

> Nummer5Lebt grüßt mal nach Berlin

> Guest5 sucht Anschluss...

(lenchen) lummerland

(Guest1) glauben wir dir

> Nummer5Lebt ist die einzige Nummer 5

(Guevara) jaaa

(Guest5) > sucht Anschluss...

> > Irish Failet
> 0:15 mama betritt den Raum
> (Guevara) guest5 wer bist du *wissenwill*
> > IronEagel geht mal wieder bye bye
> track schreit: MOIN MAMA
> > Irish sagt hallo zu allen
> (track) sofortgeldzurückgeb
> 0:15 Guest1 verläßt den Chat
> (mama) moin track
> 0:15 Beaniebaby betritt den Raum
> (Guest5) bin m,24 und harre darauf in euerer Gemeinde Fuss zu fassen [22]

Compared with traditional e-mail, content is secondary in chats. The primary focus is on the effects of one's performance which undoubtedly may be "hidden" in what appears at first glance to be a type of shorthand. The objectives are to gain attention and to entertain; to engage in personal PR adequate to the medium or chat, not to exchange ideas or carry on discourse (of a substantial nature). [23]

Based on initial samplings of cases where e-mails are used to communicate with an individual or with several others, the style and form among the new private users appear to be similar if much more detailed than the sequential, quite abbreviated comments appearing in chat rooms. [24]

6.2.2 New professional users

If inadequate preparations are made for the introduction of new forms of electronic communications (intranet, e-mail, etc.) at businesses or other organizations and the periods of transition are rough, part of the staff often ends up being overwhelmed. In such cases, new possibilities of electronic communications tend to be used passively, particularly, for example, if experi-enced users brutally reject these newcomers' active attempts at communication (with Internet keys or PC virus warnings[4]). This group's communication often seems somewhat awkward and unrefined in comparison with original users'. These newcomers ignore conventions, attempt their own approaches, and include attachments (of documents) that are inadequate for the receivers addressed. All this leads to aversion on the part of old-time users. [25]

Another, apparently more flexible, user group employs the new electronic technologies as a tool of communication, as an instrument for issuing instructions or orders by e-mail. These users subordinate the new electronic media to hierarchical communication modes based upon power and command, dispensing with all hints of the classic communicative discourse common among earlier users. Below is a typical example of this style from an organization which has had e-mail in its corporate network for two or three months: [26]

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4   Cf. Jan Harold BRUNVAND (1999).

The e-mail reads:

> (No salutation)
>
> I expect to receive the draft of the A report from all of you by tomorrow morning at y o'clock in x format.
>
> N.N. [27]

Discussions in the style of classic e-mail communication (cf. section on "Classic Users") are obviously neither desired nor within the scope of experience of the recipients. This e-mail is merely an electronically written version of the type of instruction or order (formerly) issued on paper. It also typifies business/organizational use in external communications (which tends to take on more elements of the classic form of a letter, e.g. with salutation, etc.). [28]

Content is naturally the focus of this business communication and is expressed in telegram-style orders, criticism, feedback and in some cases, apologies. Stripped of all trappings (e.g. of typical phrases and embedded elements which have been socially customary in these communicative situations until now), this stark form of communication highlights the instrumental character and demands that the recipient pay attention. From the very outset, a genuine dialog on the subject matter is suppressed, and a clear signal is sent that it is undesired. This form of communication actually underscores the hierarchical structure of the flow of communication compared with face-to-face communication, which usually consists of an introductory and closing sequence as well as supplementary nonverbal aspects. [29]

7. Notes on the Economy of Communication

The classic form of e-mail communication had certain advantages over a letter written on paper. There was no postage and the message (i.e. the contribution to a discourse) was received immediately by the addressee. The recipient or dialog partner then usually responded, and still responds, to this message with an answer given after a time delay of his or her choosing. With mailing lists, recipients could decide for themselves whether to ignore the contribution or to contribute to the discussion with a comment of their own. [30]

In the modern forms of professional or business e-mails and even in chats, recipients no longer enjoy this temporal autonomy; the advantages of communicative economy are even more pronounced on the other side. [31]

The new electronic technologies are highly efficient means of communication in a modern work context. They are economical because they reach the recipient quickly and at a low cost. They can be abstracted from context and can shift the burden of any necessary interpretation from the very outset to the recipient to a much greater extent than in phone calls or face-to-face conversations or discussions. In addition, they can be addressed to several persons at once, and used by the sender whenever he or she wishes. Instructions can even be issued

to employees late at night. The brief, often blunt style also reduces the amount of typing involved. [32]

The new electronic forms of communication are also highly efficient for modern private users, particularly in chats, because they limit the ancillary costs of communication attempts and reduce communications to the elements effective in gaining and holding attention. They eliminate the need to hit a number of nightspots to meet different people. Time no longer needs to be spent in picking out just the right outfit or in applying cosmetics. The user switches at the click of a key from one chat room to the next without the travel expenses or travel time involved in personal face-to-face encounters. Personal conversation partners are also more present than in non-cyber situations; they can be observed and addressed more easily, parts of the discussion can be shifted to "private rooms" without further ado. This is also an important factor because many chat situations appear to have a more or less erotic character. [33]

The short, rapid-fire form and structure of the two new styles of communication also eliminate the usual transaction costs, i.e. communicative ancillary costs such as introductory sequences on the phone or the traditional consumption of refreshments in face-to-face encounters. Both forms are one-dimensional, being limited to electronic writing, yet they are highly efficient and center on eliciting attention. They are economical tools of communication and highly efficient in attracting and holding attention (on attention economy cf. Michael H. GOLDHABER 1997 and Georg FRANCK 1998). [34]

8. Interim Conclusions

In the early days of these new electronic technologies, discursive communication predominated and was often seen as and expected to be a supplement to and a means of democratizing communication along the lines of "consumer empowerment" or "citizen empowerment." Today, the two new "abbreviated" forms of communication appear to be the most frequently used, i.e. e-communication as an instrument and e-communication as a means of eliciting and holding attention. Both may well increase the efficiency of communication, but it is questionable whether they improve the quality of life of those engaging in them. The new abbreviated style of communication also appears to be gaining an ever larger foothold in mailing lists and other classic forms of use. [35]

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