

Extended Abstract: Function, Problems, and Regulation of Search Engines in the Internet

Search engines are the most used type of offer in the internet (van Eimeren/Gerhard/Frees 2003: 35). However, they have hardly been analyzed yet in communications sciences. Most of all, search engines have an orientation function but at the moment are also increasingly significant as stores of information. Thus, the market leader Google in 2004 made an agreement with five big libraries on digitalizing 15 millions of books and documents. Particularly in France this announcement provoked reaction, as they said that a cultural inequality was to be feared if predominantly literature in the English language was made accessible in this way.

Altogether, the competition of the three great suppliers Google, Yahoo, and Microsoft has increased during the year 2004. Google going public on August 19th, 2004, drew attention at the search engines market. The company made returns of 1.67 Billions of US-Dollars, more than 500 of which were supposed to be invested in the extension of the search engine in 2005. In the course of the year the two main rivals Yahoo and Microsoft caught up: Yahoo split up with Google and invested 2 Billions of US-Dollars. Microsoft gained independence from Google and in November, 2004, started the test-version of its own search-technology. After the competitors having caught up with most of Google's lead, experts since recently consider the possibilities of search-technology to be exhausted. Thus, competition has shifted towards specialized search offers and supplementary services. Altogether, functional expansion and convergent development are to be observed, the great suppliers thus coming closer to each other.

According to Ferguson's opinion (2005: 39), competition develops towards a "war of architectures": Finally, he says, it is all about defining standards for processing and search of digital information on all technological platforms. De facto, standards are set up by the market leader, because of which the competing entrepreneurs will at first try to reach a share of the market which is as big as possible.

The competition of the great US-search engines also influences the German market, where the "global players" appear with country-specific offers. For 2004, a total of 193 offers in the German language

were investigated. In 2002, one third of the German-speaking search engines were run without commercial interest, one fifth served the image of a company. Almost one half was part of a portal (cf. Machill/Welp 2003: 76f.).

The question of how big the market leader Google's influence is on controlling attention in the internet cannot yet be finally answered. Basically, however, there are limits for controlling the attention of search engines: while traditional mass media decide about which news and opinions are published, search engines only inform about already existing offers. Moreover, a growing share of users is not interested any more in new sites (cf. van Eimeren/Gerhard/Frees 2003: 354f.), thus trends indicate that the demand for search-performance may decrease. The majority of users also searches parallel in one of the two other top-3 search engines (cf. Nielsen NetRatings 2005). Google's influence on traditional mass media, the so called "Googleization" (Seifert 2003), has not yet been confirmed by studies.

Tests show that despite the huge market share the quality of Google has not discernibly worsened in comparison to other search engines (cf. Neuberger 2005: 6f.). A part of the users critical attitude towards business leads to the operators being closely watched and irregularities being published (e. g. at google-watch.org or in Germany by "Telepolis").

Several studies give evidence to the low degree of competence of search engine users both regarding the evaluation of hit-lists and working the search engines (cf. Machill/Welp 2003: 166-175, 341-345; eprofessional 2004). The different competence of the users might result in a digital divide of the second order (cf. Marr 2005: 28).

The quality of search engines is not only affected by technological weak spots but increasingly also by external and internal ways of manipulating. Results are externally manipulated by search engine optimizers who on behalf of suppliers are supposed to improve the chances of attention of certain web-sites. Most of all, affiliate-programmes by online-shops and auctions have contributed to an increasing share of spam at Google (cf. Karzauninkat 2004b: 90; Roush 2005). In the course of a survey among German-speaking suppliers of search engines it occurred that rather easily applicable kinds of spamming are predominating, e.g. using false keywords within the meta-tags (cf. Machill/Welp 2003).

The problem of internal manipulation is in hits which are paid for by website suppliers and which are insufficiently or not at all labelled as being commercial. In 2001 the consumer advocates' association Commercial Alert pointed out to this practice by filing a suit at the Federal Trade Commission (FTC). Also search engines in the German language combine commercial banners to searches regarding subject matter; payed results are also widely spread (cf. Machill/Welp 2003: 90f.). Most of all, bought places on the hit lists themselves seem to be a problem. Studies show that many users do not know the practice of payed hits (cf. Princeton Survey Research Associates 2002: 17; Machill/Welp 2003: 179f.; Marable 2003; Frankfurter Allgemeine Zeitung 2005). Informed online-users in their majority demanded clear labelling. Of these, 45 per cent also stated that they would stop using a search engine if paid hits were not appropriately labelled (cf. Fallows 2005: 16-21).

Obviously, Google differentiates the accessibility of certain sites according to countries. Due to this, this search engine was confronted by the accusation of intransparent influence on search results and of over-hastily giving way to political pressure (cf. e. g. Palm 2002; Zittrain/Edelman 2002; Finkelstein 2003; Jodda 2003; McHugh 2003; Rötzer 2004; Schwan 2004c). On the other hand, Google and other search engines are also criticized for making access to problematic sites (pornography, propaganda etc.) possible.

In Germany, during the past few years there have been intensive debates on (self)regulation of search engines. A first try was made by the Bertelsmann Stiftung (Bertelsmann Foundation) which in 2003 introduced a code of conduct regarding the self-obligation of search engine-suppliers. However, response was very low, so that further steps (seal of quality, founding an organization of self-control) were given up (cf. Bertelsmann Stiftung 2003, 2004). In February, 2005, the "Freiwillige Selbstkontrolle Multimedia-Anbieter" (FSM) (Self-Control Organization of MultiMedia Suppliers) introduced a code of conduct for search engines (cf. FSM 2004). It also includes a procedure of complaints and a list of sanctions. Moreover, the search engines obliged themselves not to make accessible those sites as put on the index by the Bundesprüfstelle für jugendgefährdende Medien (BPjM) (Federal Review Board for Media Harmful to Young Persons). Such detailed indications are lacking in the case of foreign suppliers, however. The Bundesverband Digitale Wirtschaft (BVDW) (Federal Association of Digital Business) decided in 2004 to grant in future a

certificate to respectable marketing agencies for search engines in order of checking the spamming of search engines. However, it is much too early to draw a conclusion regarding the effect of these kinds of self-control.

Orientierungs- und Speicherfunktion von Suchmaschinen

Suchmaschinen sind in der Kommunikationswissenschaft bisher noch kaum analysiert worden,¹ obwohl sie der meistbesuchte Angebotstyp im Internet sind (vgl. van Eimeren/Gerhard/Frees 2003: 35). Der Grund für die große Bedeutung von Metamedien im Internet sind die spezifischen *Orientierungsprobleme und -potenziale* des Internets. Das Internet vereinfacht den Zugang zur Öffentlichkeit: Kommunikatoren sind nicht mehr auf Redaktionen angewiesen, die als „Gatekeeper“ Aussagen prüfen und selektieren, sondern können selbst als Anbieter auftreten. Die Nutzer ihrerseits haben einen unvermittelten Zugriff auf eine Vielzahl von Angeboten. Dadurch sind sie aber auch alleine mit der Aufgabe konfrontiert, aus der Überfülle verfügbarer Seiten eine sinnvolle Auswahl zu treffen. Aus der Sicht der Anbieter schwindet angesichts der „Informationsflut“ die Wahrscheinlichkeit, die Aufmerksamkeit von Nutzern zu gewinnen und Anschlusskommunikation auszulösen.

Nach der ARD/ZDF-Online-Studie 2004 sind für drei Viertel der Online-Nutzer (74 %) Suchmaschinen die zentrale Quelle für das Auffinden neuer Seiten (vgl. van Eimeren/Gerhard/Frees 2004: 355). Sie sind damit die wichtigsten Navigatoren, die den Weg zu Informationen im Internet weisen. Digital aufberei-

¹ Im Rahmen des Forschungsprojekts „Transparenz im Netz“ (2002/2003) wurden erstmals umfassend die Anbieter, Angebote und Nutzer deutschsprachiger Suchmaschinen empirisch analysiert. Die Bertelsmann Stiftung hat dafür Forscher an den Universitäten Münster und München beauftragt. Dabei wurden eine Anbieterbefragung, Inhaltsanalysen von Trefferlisten (Christoph Neuberger), eine repräsentative Nutzerbefragung (Wolfgang Schweiger), Laborexperimente (Werner Wirth) sowie ein Test von Seiten-Optimierungsverfahren (Christoph Neuberger, Stefan Karzauninkat) durchgeführt. Die in diesem Beitrag zitierten Projektergebnisse sind im Sammelband von Machill/Welp (2003) dokumentiert.