

The Relevance of Ethical Reflection for Technology Assessment: The Case of the Internet

Armin Grunwald

*Forschungszentrum Karlsruhe, Institute for Technology Assessment
and Systems Analysis (ITAS)*

1. Technology Assessment and Ethics – A Complicated Relationship

In earlier concepts of Technology Assessment (TA), scientific advice to politics consisted above all in providing descriptive knowledge and predictions for the future (Gibbons 1991). The first great phase of reflection, which was catalyzed in particular by the founding and the work of the American Office of Technology Assessment (OTA), built primarily on sociological, political, economic or jurisprudential approaches. TA was supposed to inform the political system about the relationships between technology and society, in particular, which consequences of technological innovations are to be expected. It is at present scarcely controversial that the development of technology requires normative orientation, and that TA should concern itself explicitly with this last (Grunwald 1999, Paschen 1999). The division of labor between value-free science and norm-positing politics miscarries on the very fact that the description of technology's possible consequences can't be independent of their evaluation, and can by no means simply be conceptualized as subsequent phases of analysis. Not only judgements, but also descriptions make use of linguistic systems of differentiation which are dependent on the purpose of the investigation, and are therefore not value-neutral (Mittelstraß 1974).

In many cases, TA can't be a purely descriptive endeavor. Normative aspects have to be taken into consideration and conscientiously reflected in order to provide orientation for the development of technology. Planning the future of technology always comprises normative dimensions. Ethics of technology is indispensable whenever conflicts between the respective moral convictions of societal groups or persons affected by technology have to be taken into account (Grunwald 2000a). Technical innovations can "disturb" moral coherence, and make ethical reflection for modification or supplementation of the normative framework necessary. The normative frameworks within which we live, work and decide are frequently challenged by new technologies, and have to be developed further.

Whether societal development of technology as applied to the Internet – and informed by TA – is also obliged to ethical reflection or not, is to be analyzed below. The focal point will be the question, how responsibility for content provided in the Internet is to be distributed among the groups involved.

2. The Case of the Internet

2.1 *The Challenge of Assigning Responsibility in the Internet*

The mention of “freedom of action“ and of the absence of supervision is never missing in any list of the Internet’s basic characteristics. Whether this is meant in the sense of a genuine political freedom of opinion, an anarchic, unregimented stage for self-portrayal, or of a free space for the limitless unfolding of creativity: the Internet’s permissiveness is extolled on the one hand exclusively from this liberal viewpoint: “The Internet is an example for a real, functioning anarchy“ (Busch 1999, p. 39). Anarchy, however, also has disadvantages. In the Internet, this doesn’t seem to be as detrimental as in the case that a national government became anarchic, because – in contrast to the state – nothing is decided in the Internet which is binding for everyone. But even the simple provision of Internet content without regulation meets increasingly with criticism, because this liberalism also permits contents which don’t necessarily find societal acceptance. It “allows“ use also for purposes which in society in general are seen as undesirable and as politically or morally questionable – in the corresponding cases, even as criminal: the spread of right-wing extremist or pornographic material, or use of the Internet to coordinate organized crime.

The Internet’s permissiveness and the question how to deal with its undesirable effects leads to a specific role for ethics. To begin with, we can pose the question of the moral responsibility for content in the Internet. Who has which responsibility for content? The Internet, as a complex network with numerous people involved, makes the unequivocal assignment of responsibility difficult. Should there be an examination of content, and if so, at which point: when content is published, while it is being sent, or when it is opened? Should this be a regulatory societal supervision, left to a voluntary self-censorship of those concerned, or would it be sufficient just to leave the decision to the “mature“ user?

All of these alternatives have normative aspects. The question in the following discussion is, whether and to which extent ethics can contribute to an answer in this case, or whether this is merely a problem for politics, law, or for negotiation processes guided by power-relationships and other interests. The answer to this question presupposes reflection on the concept of responsibility and on the process of assigning responsibility.

Responsibility is no “natural object“, in the sense that one either has responsibility or not, but is rather always the result of an act of attribution, either when the actor himself takes on responsibility – i. e., ascribes it to himself –, or by means of the ascription or attribution of responsibility by others. The formulation, “Who has which responsibility?“ is too narrow, and disregards the decisive act of attribution. The attribution of responsibility is an act which is done for certain purposes and according to certain rules (cf. also Jonas 1979, p. 173). Rules of attribution are in their turn in need of justification inasmuch as, e. g., they delineate the circle of individuals responsible, and provide criteria, which requirements individuals have to meet in order to be able to be made responsible. The attribution of responsibility is a prescriptive act, the presuppositions for the justifiability of which belong to ethics’ own field of responsibility – in order to prevent factually acknowledged criteria of attribution from being applied uncritically.

As far as the responsibility for content published in the Internet is concerned, a look into the rules for attribution of responsibility is first necessary: who should be made responsible for what, and why? Various concepts of humanity, various societal ideals, diverse ideas of the state are incorporated into the rules (and usage) of the attribution of responsibility. These rules may seem “constructive“, but are not arbitrary. A choice among several different options for ascribing responsibility doesn’t consist in throwing dice with just any result whatsoever, but in a weighing of alternatives under consideration of arguments of diverse provenance. It is especially important, in pursuance of this end, to take societal standards of rationality and normative standards into consideration. Such societal standards are implicit in the “a priori“ which precedes the attributions of responsibility, in which society’s “biography“, too, is mirrored (Grunwald 2000b). And ethical reconstructions and constructive preliminary considerations are necessary exactly for this purpose. Which are the practical rules of lifeworld- or societal attribution of responsibility, which normative standards are fundamental for them, which is their relationship to other segments of society’s normative framework and to ethical principles, and how can one use them as a criterion for responsibility in the Internet? This concern can only be mentioned here, but not be brought to a solution. In the following, however, the formulation of the questions which pose themselves in this type of reflection on the Internet, based on the ethics of responsibility, are to be stated more precisely.

In the question of the content offered in the Internet, the propositions and the contributions in the discussion can be assigned to two contrary positions: proponents of substantial regulation, independent of the practical problems caused by the Internet’s supranational character; and proponents of a libertarian standpoint, which leaves it to the user to decide, which content is accepted. Prima facie, the allusion to the “mature“ citizen as “inspector“ should suffice or be immediately convincing, because regulation would basically be paternalistic and patronizing. Some see the tendency to leave the supervision of content to the free interaction of supply and demand (BAH 2001). This would correspond to an implicit attribution of responsibility to the user – and, in fact, the *total* responsibility: “The users of the new media have to sanction offences against moral norms, and in this manner help the self-censorship of electronic data transfer become customary“ (Münchener Erklärung Internet&Politik [Munich Declaration, Politics&The Internet], quoted according to Funiok 1999, p. 320). A further common interest on content is, in this viewpoint, either outright denied, or – if it is acknowledged – the possibility of putting it into effect is doubted.

At second glance, however, this opinion doesn’t seem to be so absolutely convincing – or rather, critical questions arise. The most important of these concerns the fact that this concept of direct control of media content by the user hasn’t been realized in this way in other media contexts. On the contrary – there, there are regulatory restrictions and institutions which enforce them: the Children and Young Persons Act, voluntary self-censorship, prohibition of certain types of content, the press law, radio and television councils. All of these regulatory instances act as filters by means of which contents are inspected according to more or less clear criteria. These filters result in the situation that not all of the responsibility for the media contents he wants to see can be assigned to the user, because he is confronted with a pre-selected assortment. Through the “filter function“ of regulations, the individual is (partially) relieved of the burden of decision on the one hand (exculpatory function of institutions); on the other hand, regulation also leads to a narrowing of the range of possibilities and is, in a certain sense, authoritarian (Hu-

big 1982). The next question which poses itself is, according to which criteria in society such filter functions are established, which normative assumptions underlie them, and – if the responsibility should be assigned totally to the user – whether, and under which circumstances a society can do without these filters. In order to analyze this complex in greater detail, the following implications and premises of the delegation of all responsibility to the user should be noted:

- *Imposition on the User*: The user should – in the sense of the above quotation from the Munich Declaration, *The Internet&Politics* – punish the providers for content for which they, as a rule, aren't responsible, because the contents were produced by others. This would impose a moral duty to censorship on the users. The user as a “private police officer“ would be something completely different from a user who – as a mere user – decides according to his needs, or according to the “goods“ offered, what he accepts, and what not. In this case, a public role would be assigned to (and imposed upon) the user as a private individual, which transcends the scope of a private decision to buy or to use.
- *Eminent Optimism*: Individuals decide in an uncoordinated manner about their behavior, and according to individual needs and opportunities. They can only with great difficulty be persuaded to collective response. By way of illustration: this would be so, as if, throughout society, a delivery service should be boycotted, because its drivers often park in violation of traffic regulations and as traffic hazards. This type of mobilization of individuals succeeds only in rare cases (as, for example, in the case of preventing the sinking of the oil drilling platform Brent Spa). It seems quite optimistic to want to sanction content by means of a censorship exerted by the users.
- *Implication of a Consensus of Values*: Finally, it is presumed that a somewhat homogeneous opinion exists among users on what is to be understood under an “offence against moral norms“ (s. the quotation above). This, however, is doubtful even on a regional or national scale – all the more so on the global level.

2.2 Normative Aspects of the Attribution of Responsibility

In the following, the normative aspects of this ascription of responsibility – out of which requirements on ethical reflection result – are to be investigated in greater detail under the aspects of 1) legitimation, 2) the concept of humanity, and 3) participation.

(ad1) Legitimation: Legitimation (in the sense of political and legal legitimation) is generated in democratic systems by the correct and transparent carrying out of procedures (Luhmann 1983, Grunwald 2000b). If we assume that an attribution of the entire responsibility for content in the Internet would rescind regulation, could the consequences which result from this procedure be legitimized by the sum of the users' individual decisions? This seems to be the wrong question, because the problem of legitimation wouldn't pose itself any longer. This solution would much rather bring about the abolition of the legitimacy problem. Content would be legitimized by demand; lack of demand would mean lack of legitimation. The abolition of the question of legitimation corresponds to the dissolution of politics in this sector: the dimension of politics as a complex process of opinion formation and institutionalization in which a “commonwealth“ develops out of the individual preferences of numerous people, would vanish

out of the question of content in the Internet. The Internet would turn into a supermarket. This wouldn't necessarily be an ethical problem. The deregulation of telecommunications and of the electric power market have displaced politics to the advantage of opening new markets. The question is, however, that of the ethically relevant side effects of this sort of development, and how to deal with them, e. g., whether and to which extent problems of justice arise (cf. the discussions on the "digital divide" or "universal access"), whether the protection of certain groups of people (children, for instance) would be endangered, whether human rights would be violated, etc.

(ad2) Concept of Humanity: If the Internet is in every respect a huge supermarket for information and services, this entails an "economization" of the "mature" citizen. The preference-oriented demand expressed by choices in this supermarket would be seen as legitimate and worth satisfying, just because they are actually expressed. If the actual demand for content is the unquestionable last instance of control in the sense of demand-oriented self-determination, then this assumption is founded on an economic concept of humanity: human beings as individuals who make decisions to buy and to use solely according to their own unreflected preferences. The aspect of the "zoon politikon", of deliberation on common goals, questions of organizing the "commonwealth", and of their mutual relationship play no role in this situation. In this sense and in this case, the designation "mature citizen" is meant only descriptively: the citizen is just as mature as he proves himself through his user preferences to be. This isn't trivial, but is rather the central point of a confusing mixture of two concepts of maturity. In the European Enlightenment, the emancipatory discourse on the citizen (or "citoyen") was by no means meant merely descriptively, but in essence also included contrafactual expectations on maturity. Emancipation in this tradition always also includes impositions on the citizen, inasmuch as the goal is to transcend the current state of moral and cultural development. If the Knowledge Society is understood as the realization of elements of the Enlightenment (Mittelstraß 1998), if its further development is supposed to promote the citizens' emancipation, then this places increased demands on the citizens' rationality. Attributing the responsibility to the users in the Internet with the argument that so, the Enlightenment would reach its goal, because the users can finally decide unfiltered and for themselves what they want to see, is based on a fundamental misunderstanding of interpreting the Enlightenment's normative concept as descriptive. It is self-evidently an important objective for ethics in this discussion to clarify, explain and criticize this misunderstanding.

(ad3) Participation: This confounding of preference egoism with emancipation takes place – to be concrete – in the discussion on Internet-supported opportunities for participation. The discourse on dialogue and participation takes place, as a rule, in the context of the emancipatory ideals of a citizen-oriented democracy (most clearly, presumably, in discourse-ethical approaches: Skorupinski/Ott 2000). In the discussion on the use of the Internet, the term "participation" is, in fact, used, but often in different meanings. Then it isn't so much the concept of a "civil society" which stands in the foreground, but rather more strongly the possibilities of optimizing offers in the Internet with regard to the users' expectations. It is certainly a simple matter of prudence to design Internet products and services under consideration of their future "environment", and not just "blind", only with regard to technical specifications. In normal market research, this principle is, therefore, also widespread. But this has nothing to do with the "participation"-discussion. The synonymous use of words involves the risk of misunderstandings:

participation refers to taking part in the constitution of the “commonwealth“ (“public good“); the “involvement“ (“participation“) of the users in designing Internet sites, on the other hand, helps to optimize the products. Both visions of an interactive Internet society of well-informed individuals as a “civil society“ and of the global economic paradise as a boundless supermarket are incompatible with strong normative content. One can discuss both of them; but it should only be fully clear what we are talking about in each individual case, and which respective normative connotations this entails.

If the ascription of all of the responsibility for Internet content to the “users“ has normative aspects, then this also holds true for potential regulations, however they might be formulated. These have to suffice – because they are generally binding – high demands on political legitimation, argumentative generalizability, universalizability, moral justifiability and societal acceptability. The proposition is, that, in this manner, too, an important role is assigned to ethical reflection, namely, in argumentative deliberation for the preparation of regulations, especially in view of the reconstruction of the normative premises comprised in the various options for regulations.

3. Experimental Ethics in Technology Assessment

It has become apparent that ethics in the Internet can’t be limited to (n)etiquette in on-line communication – as this is often put forth (cf. to the criticism of this one-sidedness, Debatin 1999 and Grunwald 2001). Ethics and an understanding of society are related to one another alone by the fact that the corresponding terms, such as Knowledge Society, Information Society, Post-Industrial Society or Learning Society aren’t meant merely descriptively, but also have normative connotations.

Scientific and technical innovations lead to the development of new fields of knowledge and to new skills in society. The connection of these islands with established stocks of knowledge, with the normative framework and the economic relationships in society in the form of demand is the most important aim of societal appropriation of technology (Halfmann 1996). The Internet is still only at the beginning of this assimilation. By means of reflection of the Internet’s normative aspects and of its utilization, the ethics of technology contributes on the one hand to developing society’s normative framework further, but on the other, also to clarifying the implications of the existing normative framework, and especially of its philosophical and ethical foundations, for the use of the Internet, and thereby to providing orientation for designing the new means of communication.

These functions can be illustrated on the example of the term “coherence“. Societal coherence is incomplete and unstable, a fragile mesh, which is continually being called into question and challenged, e. g., by technical and social innovations and the conflicts they give rise to. In the societal process of appropriation of new technical opportunities, the question is, whether the innovation is coherent to the already Known, and if not, how this coherence can be brought about.

Deliberation on coherence takes place at the interface between the Known and the New: in impending technology-relevant decisions *ex ante*, reflections on coherence help provide orientation on the further course of societal development with consideration of society’s “biography“. The coherence of uses of the Internet and the consequences of these uses with societally openly or implicitly acknowledged contrafactual assumptions, such as, e. g., conceptions of a just society, the emancipation of the individual, of a sustain-

able economy, the opportunity for criticism, etc. (Grunwald 2000b, chap. 4.3.4) merits special attention.

Deliberation on coherence with regard to the relationship of the Internet's possibilities and the societal normativity practiced offer chances for learning for the further development of this normativity. It isn't ethics' sole responsibility to decide whether Internet communication is compatible with present moral convictions. By no means is it a matter of examining the Internet ethically with the aim, "that the resulting societal structure remains in harmony with our current system of values" (Rauch 2000, p. 55). Ethics is neither censorship, nor is it per se "conservative" in the sense of the quotation just given, because the normative basis of a society is no immutable and rigid boundary condition, which decides on the acceptability or desirability of a new technology, but can itself be called in question by new technologies and be opened for further development. The ethics of technology doesn't just apply current normativity to the Internet, but reflects the relationship of existing (reconstructed) normativity to the new technical opportunities. In this sense, technology-ethical reflection as an element of technology assessment is explorative, constructive and experimental.

References

[BAH] Booz-Allen-Hamilton (2001): Studie im Auftrag des Büros für Technikfolgenabschätzung des Deutschen Bundestages.

Busch, R.J. (1999): *Schöne neue digitale Welt?* Lutherisches Verlagshaus Hannover

Debatin, B. (1999): Ethik und Internet. Zur normativen Problematik von online-Kommunikation. In: Funiok, R., Schmälzle, U.F., Werth, C.H. (1999, Hg.): *Medienethik – die Frage der Verantwortung*. Bundeszentrale für politische Bildung. Bonn, S. 274-293

Funiok, R. (1999): Münchner Erklärung zu „Internet&Politik“. In: Funiok, R., Schmälzle, U.F., Werth, C.H. (1999, Hg.): *Medienethik – die Frage der Verantwortung*. Bundeszentrale für politische Bildung. Bonn, S. 319/320

Gibbons, J. (1991): Technology Assessment am Office for Technology Assessment: Die Entwicklungsgeschichte eines Experimentes. In: Kornwachs, K. (Hrsg.) *Reichweite und Potential der Technikfolgenabschätzung*. Stuttgart, S. 23-48

Grunwald, A. (1999): Technology Assessment or Ethics of Technology? Reflections on Technology Development between Social Sciences and Philosophy. *Ethical Perspectives* 6 (1999)2, S. 170-182

Grunwald, A. (2000a): Against Over-Estimating the Role of Ethics in Technology. *Science and Engineering Ethics* 6(2000), S. 181-196

Grunwald, A. (2000b): *Technik für die Gesellschaft von morgen. Möglichkeiten und Grenzen gesellschaftlicher Technikgestaltung*. Frankfurt, Campus

Grunwald, A. (2001): *Verantwortung im Netz. Ethische Fragen an Gestaltung und Nutzung des Internet*. Studienbriefe der FernUniversität Hagen (im Druck).

Halfmann, J. (1996): *Die gesellschaftliche "Natur" von Technik*. Leske + Budrich, Opladen

- Hubig, Ch. (1982): Ethik institutionellen Handelns. Frankfurt, Campus
- Jonas, H. (1979): Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation. Frankfurt. Englische Übersetzung: The Imperative of Responsibility. Chicago 1984
- Luhmann, N. (1983): Legitimation durch Verfahren. Suhrkamp, Frankfurt
- Mittelstraß, J. (1974): Die Möglichkeit von Wissenschaft. Suhrkamp, Frankfurt
- Mittelstraß, J. (1998): Information oder Wissen – vollzieht sich ein Paradigmenwechsel? In: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (Hg.): Zukunft Deutschlands in der Wissensgesellschaft (Tagungsband). Bonn, S. 11-17
- Paschen, H. (1999): Technikfolgenabschätzung in Deutschland – Aufgaben und Herausforderungen. In: Petermann, T., Coenen, R. (Hrsg.): Technikfolgenabschätzung in Deutschland. Bilanz und Perspektiven. Campus, Frankfurt, S. 47-62
- Rauch, W. (2000): Informationsethik. Die Fragestellung aus Sicht der Informationswissenschaft. In: A. Kolb, R. Esterbauer, H.-W. Ruckebauer (Hg.): Cyberethik. Verantwortung in der digital vernetzten Welt. Kohlhammer, Stuttgart et al., S. 51-57
- Skorupinski, B., Ott, K. (2000): Technikfolgenabschätzung und Ethik. Eine Verhältnisbestimmung in Theorie und Praxis. ETH-Hochschulverlag, Zürich.