Does the Internet Deliver?

Eight Values as a Yardstick for the Production, Moderation and Regulation of Public Communication on the Internet

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Integration or Disintegration of the Public Sphere?

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IN SHORT

The question of the (dis)integration of the public on the Internet must be posed along several dimensions (topics, opinions, spaces, etc.). Active user selection and passive control through algorithms can contribute to this. At present, echo chambers and filter bubbles are discussed as negative consequences of the public sphere´s disintegration. However, empirical evidence is hard to find for both; there are only a few indications. Spatial integration is questionable. Rather, the existing borders between countries, languages and cultures are reflected on the Internet.

One of the central functions of mass media is the integration of society.[1] Mass media are thought to have an integrative effect along several dimensions through their broad reach (with which they can reach the entire population), and their content offers: by focusing attention on topics of public interest (*agenda-setting*). Integration can also be investigated in the spatial dimension: is there a European or even a global public?

The Internet is associated with *optimistic expectations* for better networking: everything is visible, everything can be connected to everything, everyone can communicate with everyone. The Internet offers greater transparency and facilitates exchange across existing borders between shared interest groups, bodies of political opinion and state, linguistic and cultural areas. Personal networks can be extended further through social media than through face-to-face communication. In addition to close, strong contacts, many *weak ties* can also be established and maintained.[2]

The *pessimistic counterthesis* to this is as follows: the Internet does not promote integration, but rather fragmentation, i. e. the disintegration of the public sphere and society as a whole into small, isolated and homogeneous units (*echo chambers*). Two reasons are given for this: first, there is a tendency towards homophilia. *Users* prefer to select those topics that interest them and those opinions that encourage them in their preconceived notions (*selective exposure*). This means that the common topic agenda is lost and meaningful dispute no longer takes place. Instead, they retreat into echo chambers in which like-minded people mutually confirm each other's views. Such active and passive isolation, however, harms democracy. The fragmentation thesis is prominently represented by Cass R. Sunstein[3] and Jürgen Habermas[4].

In a widely acclaimed paper, W. Lance Bennett and Shanto Iyengar[5] argued that a growing and substantively heterogeneous media offer is leading to a more active and reflected selection of recipients along party lines. This promotes a fragmentation of the audience and its polarisation, because use and attitudes increase reciprocally.[6] However, it is not just the one-sided selection behaviour of users that is a cause for concern, but also the *algorithmically controlled personalisation* of offers. Through such control, users can, without noticing it, fall into a filter bubble[7] which narrows their horizons. Instead of "packaged" offers that provide a universal news overview, there are now "granularised" offers individually tailored to each user.[8]

A Common Topic Agenda Is Retained, with Few References to Echo Chambers and Filter Bubbles

To what extent can the results of empirical studies confirm the fragmentation thesis in its various variants? Here, it should first be noted that there are a large number of studies which are very different in terms of operationalisation, methods and objects.[9]

They reveal that the *common agenda* largely remains intact. Surveys cannot prove any significant deviation of the agenda of (heavy) Internet users from the typical agenda in the traditional mass media.[10] Content analysis comparisons of agendas in social media and professional journalistic offers also identify a relatively high degree of conformity.[11] Obviously, traditional mass media has not lost its potential to set topics on the Internet. Findings from impact studies on the question of who influences which agenda show that this is not a completely one-sided relationship: blogs and other social media can also set topics for the mass media.[12] What is decisive for the question of integration, however, is not the direction of influence, but the degree of convergence between the agendas.

Less clear, however, are the findings on the question of whether *bodies of opinion are being closed off*. There are primarily networks leading to the body of opinion, which users themselves come from. Thus, a one-sided political selection can be seen in the use (*selective exposure*), and networking of offerings (e. g. through links) in general[13] and especially for news sites,[14] political blogs,[15] Twitter[16] and Facebook.[17]

Nonetheless, the proportion of connections to the general media and the opposing camp remains sufficiently high such that we should not speak of isolation.[18] The effect is also mitigated by apolitical online groups that broaden the horizon.[19] The detailed study by Seth Flaxman and co-authors[20] in the USA who evaluated data on the browsing behaviour of 50,000 users, identified the fact that the majority of online news consumption takes place on websites of mainstream media. In their meta-analysis, Van Aelst et al.[21] also come to the conclusion that the empirical findings do not permit any far-reaching assumptions about a "Balkanisation" (fragmentation) of the public and an isolation of substantive parts of the population. News media, which strive for balanced and neutral reporting, are still the main source of news for most people.[22] Overall, fragmentation into bodies of opinion is therefore weakly developed on the Internet. However, this does not explicitly exclude the possibility of smaller extreme groups isolating themselves.

The *borders between countries, languages and cultures* are crossed on the Internet much less often than is generally assumed.[23] National websites predominate with respect to both use and linking. The vast majority of links to foreign websites lead to the USA. These findings speak in favour of the "myth of globalisation"[24] and the transfer of existing borders to the Internet.

The *passive, algorithmic variant of the fragmentation thesis* states that intermediaries automatically select individually according to the observed user preferences. Contrary to popular belief, however, no filter bubble has been empirically detectable to date.[25] In an experiment with the help of automated Google search queries, Pascal Jürgens, Birgit Stark and Melanie Magin[26] could not prove any personalisation effects. This is also true for the results of another study on the effects of implicit personalisation on Google News.[27] A study conducted by Facebook itself also gave the all-clear: according to the results found by Eytan Bakshy, Solomon Messing and Lada A. Adamic,[28] the individual choice of users has a greater influence on the avoidance of opposing opinions (ideological homophilia) than the algorithm of the newsfeed.

Nevertheless, it must be noted that there is still a shortage of studies and that further dissemination and perfection of algorithmically controlled selection can be expected in future.[29] Consequences associated with the use of algorithms may not be intended by the operators, but this does not change the fact that they could influence opinion formation.

The two variants of the fragmentation thesis, the active (*selective exposure, echo chambers*) and the passive (*filter bubble*), are thus assertions with little certainty as regards opinions (formation of bodies of opinion and prevention of opinion disputes). There is a lack of broad-based (comparative) studies here.[30]

Axel Bruns sums up the state of research in his book "Are Filter Bubbles Real?" as follows: "Echo chambers and filter bubbles are exceptionally attractive concepts; they offer a simple, technological explanation for problems faced by many emerging and established democracies. However, the closer one looks and the more one attempts to detect them in observable reality, the more outlandish and unrealistic they appear. [...] The research we have encountered shows simply no empirical evidence for these information cocoons in their absolute definition, especially in a complex, multi-platform environment."[31]

1   McQuail (1992: 68, 73–77, 237–273, 2003: 70–72, 81–85, 2013: 67–70) summarised order, cohesion and partly also solidarity together.

2   Schweiger (2017: 91–93).

3   Sunstein (2007).

4   Habermas (2006: 423).

5   Bennettt/Iyengar (2008).

6   Blumler/Coleman (2015: 120–121).

7   Pariser (2011).

8   Schweiger (2017: 81–84, 86–90).

9   As an overview see Zuiderveen Borgesius et al. (2016); Bruns (2019).

10   Marr (2002); Coleman/McCombs (2007); Emmer/ Wolling (2007); Rußmann (2007, 2010); Gehrau (2013).

11   Lee (2007); Meraz (2011); Sweetser/Golan/Wanta (2008); Maier (2010). On agenda reporting and network agenda setting: Vargo et al. (2014). Links in blogs often refer to websites of traditional mass media (e. g. Singer 2005; Reese et al. 2007: 249–252; Messner/DiStaso 2008; Kenix 2009; Leccese 2009; Meraz 2009: 691–692; Maier 2010).

12   Cornfield et al. (2005); Wallsten (2007); Sayre et al. (2010); Sweetser/Golan/Wanta (2008); Neuman et al. (2014).

13   Garrett (2009).

14   Iyengar/Hahn (2009).

15   Baum/Groeling (2008); Hargittai/Gallo/Kane (2008); Meraz (2011); Nahon/Hemsley (2014). As an overview see Nuernbergk (2013: 168–169). To one-sided use of blogs see Johnson/Bichard/ Zhang (2009); Lawrence/ Sides/Farrell (2010).

16   Himelboim/McCreery/Smith (2013); Colleoni/Rozza/ Arvidsson (2014); Barberá et al. (2015); Thompson (2016).

17   Brunner (2017).

18   There is a number of studies which contradicts the thesis of the existence of echo chambers. E. g. Hargittai/Gallo/Kane (2008); Garrett (2009); Dvir-Gvirsman/Tsfati/Menchen-Trevino (2014); Zuiderveen Borgesius et al. (2016: 6); Dubois/Blank (2018). The liberal side (Meraz 2011; Himelboim/McCreery/ Smith 2013; Barberá et al. 2015) apparently pays more attention to the opposite side or neutral media than the conservative side (differentiated: Colleoni/ Rozza/Arvidsson 2014). References to counterparties primarily serve as critical comment (Nahon/Hemsley 2014).

19   Wojcieszak/Mutz (2009).

20   Flaxman et al. (2016).

21   Van Aelst et al. (2017: 12–14).

22   Similarly: Dvir-Gvirsman/Tsfati/Menchen-Trevino (2014).

23   Aldísardóttir (2000); Halavais (2000: 18); Chang/ Himelboim/Dong (2009: 150).

24   Hafez (2007).

25   Zuiderveen Borgesius et al. (2016: 7); Hagen/Wieland/ In der Au (2017); Krafft et al. (2017).

26   Jürgens/Stark/Magin (2014).

27   Haim/Graefe/Brosius (2018).

28   Bakshy/Messing/Adamic (2015).

29   Users seem to be partially aware of algorithmic personalisation (Schmidt et al. 2017: 90–92). The Reuters Digital News Survey 2016 (Newman 2016: 12–13, 111–113), found that news selection based on personal use by algorithms even has a higher degree of approval among users than selection by journalists and editors (whereas algorithmic selection based on the behaviour of other users is lower).

30   Zuiderveen Borgesius et al. (2016: 7); Schmidt et al. (2017: 26–27); Schweiger (2017: 93). The random use of news on Twitter, YouTube and Facebook leads to a higher number of sources used compared to non-users (Fletcher/Nielsen 2018).

31   Bruns (2019: 95).

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