

Moreno Gálvez, Francisco Javier; Sierra Caballero, Francisco

Article

Social appropriation of new technologies

Internet Policy Review

Provided in Cooperation with:

Alexander von Humboldt Institute for Internet and Society (HIIG), Berlin

Suggested Citation: Moreno Gálvez, Francisco Javier; Sierra Caballero, Francisco (2022) : Social appropriation of new technologies, Internet Policy Review, ISSN 2197-6775, Alexander von Humboldt Institute for Internet and Society, Berlin, Vol. 11, Iss. 1, pp. 1-11, <https://doi.org/10.14763/2022.1.1647>

This Version is available at:

<https://hdl.handle.net/10419/254283>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/3.0/de/legalcode>



GLOSSARY
ENTRY



OPEN
ACCESS



PEER
REVIEWED

Social appropriation of new technologies

Francisco Javier Moreno Gálvez *University of Seville*

Francisco Sierra Caballero *University of Seville*

DOI: <https://doi.org/10.14763/2022.1.1647>

Published: 30 March 2022

Received: 16 September 2021 **Accepted:** 21 December 2021

Competing Interests: The author has declared that no competing interests exist that have influenced the text.

Licence: This is an open-access article distributed under the terms of the Creative Commons Attribution 3.0 License (Germany) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. <https://creativecommons.org/licenses/by/3.0/de/deed.en>
Copyright remains with the author(s).

Citation: Moreno Gálvez, F. J. & Sierra Caballero, F. (2022). Social appropriation of new technologies. *Internet Policy Review*, 11(1). <https://doi.org/10.14763/2022.1.1647>

Keywords: Appropriation, Cultural production, Information capital

Abstract: The social appropriation of new technologies refers to technological and social processes of mediation in the interaction between social actors and technological devices. As such, the concept transcends relatively straightforward ideas of access and use of technology to focus on: how users develop technological and cognitive competences; the meaningful integration of the technological devices into subjects' everyday lives and behaviour; the active and creative production of meaning; social mediation within communities of users; and the way that the interests of communities of users are represented in public spaces. This text outlines the key concepts and debates in the appropriation of new technologies through a genealogical reconstruction of relevant academic traditions, including, amongst others, cultural studies and the sociology of the uses of new technologies. This interdisciplinary approach takes into account the technical, cognitive, educational and communicative dimensions of new technologies and how they may be useful for understanding contemporary processes of technological change.

This article belongs to the **Glossary of decentralised technosocial systems**, a special section of *Internet Policy Review*.

Definition

Short definition

The social appropriation of new technologies refers to technological and social processes of mediation in the interaction between social actors and technological devices. As such, the concept transcends relatively straightforward concepts of access and use of technology to focus on: how users develop technological and cognitive competences; the meaningful integration of the technological device into subjects' everyday lives and behaviour; the active and creative production of meaning; social mediation within communities of users; and the way that the interests of communities of users are represented in public spaces.

Origin and evolution

To understand the genesis of the concept of social appropriation of new technologies we can start by considering the concept of appropriation in social production and reproduction from two key critical perspectives: Michel de Certeau's social autonomy in everyday life and the materialist psychology of Aleksei N. Leóntiev and Lev Vygotsky (de Certeau, 1980; Leóntiev, 1959).

Firstly, as one of the main influences on the development and popularisation of the concept of appropriation, the work of de Certeau can be situated in the debates on social autonomy that arose in the wake of the May 1968 student revolution in France. Within this line of thought, the conflictive aspect of Marxist debate on appropriation was recovered and translated for use in the analysis of political autonomy in the context of social relations of reproduction (Jauréguiberry & Proulx, 2011). In *The Practice of Everyday Life* (Certeau, 1980) de Certeau examined quotidian culture as a process of approbation and showed that people's everyday practices deviated from the framework provided by technocratic and industrial cultures. His work opened up the possibility of conceiving individuals not as mere consumers but actors that constitute themselves autonomously in key domains of everyday culture, through practices related to consumption, habitat and reading.

Secondly, from the field of materialist psychology, Leóntiev and Vygotsky challenged the dominant approach of behavioural psychology by developing a socio-

historical perspective that emphasised the social and cultural origins of individual and collective behaviour (Crovi, 2013; Leóntiev, 1959). Building on the work of these two authors, various generations of academics went on to develop a materialist approach to appropriation. In this conceptualisation, appropriation relates to the interaction between individuals and cultural products (including technologies), or can be conceived as a game within which the externalities of the object are combined with the individuals' interiorisation of the semiotic systems, social structures, concepts and techniques inscribed in said object (del Río, 2002; Freire, 1973; Engeström, 2001; Sannino et al., 2009).

Although following different paths, two main lines of work, which eventually converge, can be observed in the evolution of the study of the social appropriation of technologies: media consumption and reception studies, including cultural studies, and the sociology of the uses of new technologies, from the French-speaking tradition.

Media consumption and reception studies have been a central point of communications research since the inception of the discipline in the mid-twentieth century, but it has evolved through various stages. Functionalist perspectives, for example, focused on the persuasive effects of communication on audiences, which were conceived as a homogeneous and passive group (Lasswell, 1948; Lazarsfeld & Merton, 1948; Wright, 1964). In contrast, a turn in reception studies in 1960s saw the gradual introduction of macro-sociological variables and an understanding of media as a socio-cognitive mediation system (Wolf, 1987) that placed the subject at the centre of the analysis of consumption¹. This turn influenced work in psychology and functionalist theories of sociology (Katz et al., 1974), as well as new approaches from within the field of cultural studies (During, 1993).

In the evolution of media studies, the work of British and Latin American strands of cultural studies stand out as particularly relevant. On the British side, the so-called founding fathers of cultural studies, Stuart Hall, E.P. Thompson, Raymond Williams and Richard Hoggart (Mattelart & Neveau, 2003), opened the door to an understanding of reception that went beyond access and use by taking into account the capacity of the subject to actively and critically construct meaning in specific social contexts. In Latin America, a theoretical framework was developed that shifted the focus from media to spaces where meaning is produced, in other words: the space of mediation (Beltrán & Zeballos, 2001; García Canclini, 1990;

1. Although some authors had highlighted the active nature of audiences before this point in time (Brecht, 2015; Benjamin, 1968), their influence came, fundamentally, through a reassessment of their work in the 1960s.

Martín Barbero, 1987). This interdisciplinary approach brought together concepts from cultural studies, educommunication (Kaplún, 1992; Orozco, 2001) and political economy perspectives (Bolaño et al., 2012)². The result was a new model for the study of practices related to the creation and appropriation of culture, the activation of people's competence and creative experience, and the recognition of differences (Martín Barbero, 2002).

Distinct from reception studies, the second line of work developed in the French-speaking tradition of the sociology of the uses of new technologies in the 1980s (Jouët, 2000; Proulx, 2015). Instead of attempting to extend or prolong the analysis of media uses, it centred on sociological approaches to the contextualised use of technological objects such as the television remote control, home computing, the telephone answering machine and, above all, the experience of Minitel. Traditionally, this theoretical approach has favoured a critical frame of analysis. Inscribed in concepts of social autonomy, it was often defined by research on social struggle, such as the fight for information literacy or the social appropriation of technologies as a possible source of autonomy for individuals or social and political emancipation for groups. Not defined as consumers, the idea of appropriation constitutes social actors as agents that deploy active and creative resistances in their everyday interactions with new technologies (at work, during leisure time, in family relations). Within the framework of daily life and practices, users give technical objects subjective meanings (projections, associations), while uses are embedded in a system of social relations (class, gender, interethnic, intergenerational) and a lifeworld that shapes and is shaped by technological uses (Granjon, 2012; Granjon et al., 2009; Jauréguiberry & Proulx, 2011).

These approaches represented a watershed at various levels. By shifting the focus from the analysis of effects to the study of reception, appropriation is reconfigured as a process of negotiation between the emitter and receiver that is situated in specific sociocultural contexts. And, as an ordinary everyday practice, reception is therefore understood to be a continuous, complex, contradictory and interactive phenomenon. Collectively, this takes the study of appropriation beyond mere reception and a question of simple consumption. Hence, with the evolution of tech-

2. Educommunication, also known as media literacy or media education in English-speaking contexts, refers to an interdisciplinary and transdisciplinary field of study on the theoretical and practical dimensions of two disciplines: education and communication. This concept was popularised by UNESCO in the 1970s and was primarily based on the work of authors like Mario Kaplún who adapted the pedagogic work of Paulo Freire to the field of communication (Barbas, 2012, pp. 159-161). On the other hand, the political economy perspective was also influential due to its concern with the cultural processes of production and reproduction of capital, class relations, contradiction, conflict, and struggles of opposition and resistance that traverse the media landscape (Mosco, 2009).

nological change these currents of thinking gradually abandoned the framework of reception studies because, in new digital networks, the relation between subjects transcends the notion of ‘active reception’ that had been the dominant theoretical idea. Progressively, research shifted its focus to processes of appropriation and digital competence in new technologies that centre on everyday practises in the current social and cultural context (Ang, 1990; Hall & Du Guy, 1996; McRobbie, 1994; Morley 2010, 2007; Morley & Silverstone, 1990; Silverstone, 2016).

Coexisting uses and meanings

Over time, the theoretical proposals of the different perspectives have hybridised as a result of dialogue between authors and schools of thought. We can therefore identify different ways of defining the social appropriation of new technologies that share common ground, such as a rejection of explanations that are limited to understandings of access and use of technologies in terms of adaptation, integration or assimilation (Crovi, 2013).

One approach uses the concept of ‘information capital’ as a means of providing a holistic explanation for the process of access, use and appropriation of new technologies. This integrates not just economic barriers of access to digital devices or electronic networks, but “the technical ability to handle network infrastructures, the intellectual capacity to filter and evaluate information [as well as] the motivation to actively search for information and the ability to translate information into social practice” (Hamelink, 2000, p. 91).

Another perspective, proposed by researchers linked to the Latin American Network for Research on the Appropriation of Digital Technologies (RIAT) (Cabello & López, 2017; Lago Martínez et al., 2018; Sandoval, 2019) is to define the process of social appropriation of new technologies as “the set of sociocultural processes that intervene in the use, socialisation and signification of new technologies in diverse sociocultural groups” (Winocur, 2013: p. 62, translation by the authors). Within this perspective, appropriation can be analysed through the interrelationship of various dimensions, such as: availability, access, knowledge, elucidation, reflexivity, competencies, interactivity, use and the development of personal and collective projects (Morales, 2014).

Another way of ordering these dimensions is the ideal-type approach to the social appropriation of new technologies that has been developed by the French sociological tradition. As well as the pre-standing condition of material access to the technological device, this approach uses five levels or conditions (Jauréguiberry &

Proulx, 2011, pp. 81-82):

1. Technical and cognitive mastery of the device.
2. Meaningful integration of the use of the technology in the actor's everyday practice.
3. Repetitive use of the technical device that opens up the possibility of creative (new) uses in social practice.
4. Mediation in a community of practice as a source of exchange (producers of collective intelligence), transmission, and support between learning subjects.
5. At a truly collective level, appropriation implies that users and their needs are adequately represented in the establishment of public policies and that they are taken into account in processes of change and innovation in companies (industrial production and commercial distribution).

Current issues

A central debate traverses the evolution of research on the access, use and appropriation of new technologies in terms of the positive or negative impact of technological innovation for social change. Perspectives that advocate for the potentialities of technologies tend to focus on their dissemination—in particular material access to networks and technological equipment—as a means to overcome the inequality that plagues contemporary societies. This conception of new technologies is linked to post-industrialist theory and authors such as Daniel Bell, Fritz Machlup, Alvin Toffler, Zbigniew Brzezinski, Marc Porat, Nicholas Negroponte and Bill Gates, among others, (Becerra, 2003; Webster, 2004). This group has been highly influential on the technological programmes of various governments and transnational organisations. Examples of projects developed within this ethos include the Informatisation of Society in France (Nora & Minc, 1978), the Information Superhighway in the United States (Gore, 1994), the European Information Society (European Council, 1994), and the World Summit on the Information Society (United Nations, 2005).

In contrast, other research argues that technological development can be damaging as it may exacerbate imbalances in social power and worsen inequality (Robins & Webster, 1999). This line of work ranges from studies that highlight the use of technological innovation for increased surveillance and social control (Lanier, 2011; Mattelart & Vitalis, 2014; Morozov, 2011) to research on the technological determinism of perspectives that focus on material access to technology while neglecting the social aspect of the transformation of information and data into knowledge (Archer, 2017; Mosco, 2009; Servaes & Carpentier, 2006).

Such dichotomies and technological determinism can be avoided by analysing new technologies through the various dimensions of social appropriation and by understanding the process of mediation that takes place between the technical and the social. In this sense, neither can be understood separately: mediation is “technical because the tool used structures practices, and social as the motives, the forms of use, and the meaning given to the practice are drawn from the social body” (Jouët, 2000, p. 497, translation by the authors). Thus, an interesting dialogue is established between the previous lines of thought and those that analyse the conception of technological devices and their technological affordances – the possibilities for action and interaction open to users of specific technologies, but which is always limited by said technology’s design (Bardini, 1996; Hutchby, 2001).

Linked to this double mediation is a prolific field of research on the ‘digital divide’, which focuses on differences in the appropriation of technological objects based on geographic location, socio-economics, gender, and generation, among others, that can lead to social labelling and, frequently, exclusion (Ragnedda & Muschert, 2013; Van Dijk, 2020). Although there is a notable lack of systematic reviews, a significant body of research has examined topics such as differentiated modes of appropriation of subjects based on a lack of equality in the development of technological infrastructures at a global level, as well as between urban and rural areas; how new technologies can generate income and educational inequality; differences in interests between men and women that result from the historical male domination of digital objects (); and the reconfiguration of intergenerational social relations due to a breach in cultural and social practices between digital natives and older members of society (Cabello & López, 2017; Granjon et al., 2009; Gómez, 2012; Lago Martínez et al., 2018; Livingstone et al., 2017; Pereira, 2015; Sáinz et al., 2008).

Finally, we can identify work, from various scientific disciplines, that uses the concepts of technological appropriation or social appropriation of new technologies to analyse the interaction between subjects and digital devices. Beyond studies in communication and the analysis of the reception of new media and technologies, interdisciplinary studies are focusing on digital inclusion, education and media literacy, rights to communication, community computing, social movements and social change, and public policy in the information society.

Conclusion

The social appropriation of new technologies refers to technological and social processes of mediation in the interaction between social actors and technological

devices. As such, the concept transcends relatively straightforward concepts of access and use of technology to focus on: how users develop technological and cognitive competences; the meaningful integration of the technological device into subjects' everyday lives and behaviour; the active and creative production of meaning; social mediation within communities of users; and the way that the interests of communities of users are represented in public spaces.

References

- Ang, I. (1990). Culture and Communication: Towards an Ethnographic Critique of Media Consumption in the Transnational Media System. *European Journal of Communication*, 5(2), 239–260. <https://doi.org/10.1177/0267323190005002006>
- Archer, M. S. (2017). Theory, culture and post-industrial society. *Sociologia, LI*. <https://doi.org/10.36165/2411>
- Barbas Coslado, A. (2012). Educomunicación: Desarrollo, enfoques y desafíos en un mundo interconectado. *Foro de Educación*, 10(14), 157–175.
- Bardini, T. (1996). Changement et réseaux socio-techniques: De l'inscription à l'affordance. *Réseaux*, 14(76), 125–155. <https://doi.org/10.3406/reso.1996.3715>
- Becerra, M. (2003). *Sociedad de la información: Proyecto, convergencia, divergencia*. Grupo Editorial Norma.
- Beltrán, L. R., & Zeballos, R. (2001). *Estrategias de comunicación y educación para el desarrollo*. Red ERBOL / Universidad Católica Bolivariana.
- Benjamin, W. (1968). *Illuminations*. Schocken Books.
- Blumler, J. G., & Katz, E. (Eds.). (1974). *The Uses of mass communications: Current perspectives on gratifications research*. Sage Publications.
- Bolaño, C., Mastrini, G., & Serra, F. (Eds.). (2012). *Political economy, communication and knowledge: A Latin American perspective*. Hampton Press.
- Brecht, B. (2015). *Brecht On Film & Radio*. Bloomsbury Publishing. <http://www.myilibrary.com?id=752371>
- Cabello, R., & López, A. (Eds.). (2017). *Contribuciones al estudio de procesos de apropiación de tecnologías*. Ediciones del Gato Gris.
- Certeau, M. de. (1980). *Arts de faire* (Nouv. éd). Gallimard.
- Crovi Druetta, D. (2013). Matrices digitales en la identidad juvenil. In F. Sierra Caballero (Ed.), *Ciudadanía, tecnología y cultura. Nodos conceptuales para pensar la nueva mediación digital* (pp. 211–232). Gedisa.
- del Rìo, P. (2002). The External Brain: Eco-Cultural Roots of Distancing and Mediation. *Culture & Psychology*, 8(2), 233–265. <https://doi.org/10.1177/1354067X02008002440>

During, S. (Ed.). (1993). *The cultural studies reader*. Routledge.

Engeström, Y. (2001). Expansive Learning at Work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133–156. <https://doi.org/10.1080/13639080020028747>

Freire, P. (1973). *Education for critical consciousness*. Bloomsbury Academic.

García Canclini, N. (1990). *Culturas híbridas: Estrategias para entrar y salir de la modernidad* (nueva edición, 6. reimpresión). Paidós.

Gomez, R. (Ed.). (2012). *Libraries, Telecentres, Cybercafes and Public Access to ICT: International Comparisons*. IGI Global. <https://doi.org/10.4018/978-1-60960-771-5>

Gore, A. (1994). Forging a new Athenian age of democracy. *Intermedia*, 22(2), 4–7.

Granjon, F. (2009). *Reconnaissance et usages d'Internet: Une sociologie critique des pratiques de l'informatique connectée*. Presses des Mines. <https://doi.org/10.4000/books.pressessmines.252>

Granjon, F. (2012). *Reconnaissance et usages d'Internet: Une sociologie critique des pratiques de l'informatique connectée*. Presses des Mines. <https://doi.org/10.4000/books.pressessmines.252>

Hall, S. (1973). *Encoding and decoding in the television discourse* (Hall, S. (1973). Encoding and Decoding in the Television Discourse. Paper for the Council of Europe Colloquy on “Training in the Critical Reading of Television Language. University of Leicester.).

Hall, S., & Du Gay, P. (Eds.). (1996). *Questions of cultural identity*. Sage.

Hamelink, C. J. (2000). *The ethics of cyberspace*. Sage Publications.

Hutchby, I. (2001). Technologies, Texts and Affordances. *Sociology*, 35(2), 441–456. <https://doi.org/10.1177/S0038038501000219>

Jauréguiberry, F., & Proulx, S. (2011). Bibliographie: In *Usages et enjeux des technologies de communication* (pp. 126–141). Érès. <https://doi.org/10.3917/eres.jaure.2011.01.0126>

Jouët, J. (2000a). Retour critique sur la sociologie des usages. *Réseaux*, 18(100), 487–521. <https://doi.org/10.3406/reso.2000.2235>

Jouët, J. (2000b). Retour critique sur la sociologie des usages. *Réseaux*, 18(100), 487–521. <https://doi.org/10.3406/reso.2000.2235>

Kamark, E. C., & Nye, J. (Eds.). (2002). *Governance.com. Democracy in the information age*. Brookings Institution Press.

Kaplún, M. (1992). *A la educación por la comunicación: La práctica de la comunicación educativa*. FLACSO.

Lago Martínez, S. (Ed.). (2018). *Acerca de la apropiación de tecnologías: Teoría, estudios y debates*. Ediciones del Gato Gris.

Janier, J. (2012). *Ten arguments for deleting your social media accounts right now* (First edition). Henry Holt and Company.

Lasswell, H. D. (1948). Structure and function of communication in society. In L. Bryson (Ed.), *Communication of ideas* (pp. 37–52). Institute for Religious and Social Studies.

Lazarsfeld, P. F., & Merton, R. K. (2007). Mass communication, popular taste and organized social action. *Communication of ideas*, 229–250.

Leóntiev, A. N. (1959). *Problems of the development of the mind*. Progress Publishers.

Livingstone, S., Nandi, A., Banaji, S., & Stoilova, M. (2017). *Young adolescents and digital media: Uses, risks and opportunities in low- and middle-income countries: A rapid evidence review*. London School of Economics Report. http://eprints.lse.ac.uk/83753/1/Livingstone_Young_Adolescents_Digital_Media.pdf

Martín Barbero, J. (1987). *Communication, culture and hegemony: From the media to mediations*. SAGE Publications.

Martín Barbero, J. (2002). Oficio de cartógrafo. Travesías latinoamericanas de la comunicación en la cultura. *Oficios Terrestres*, 14, 157–158.

Mattelart, A., & Neveu, É. (2003). *Introduction aux cultural studies* (Nouvelle éd). la Découverte.

Mattelart, A., & Vitalis, A. (2014). *Le profilage des populations: Du livret ouvrier au cybercontrôle*. Découverte.

McRobbie, A. (1994). *Postmodernism and Popular Culture*. Routledge.

Morales, S. (2014). La apropiación de medios y TIC. Una propuesta teórico-metodológica. In V. Mayora Ronsini (Ed.), *Estudos de recepção Latino-Americanos: Métodos e práticas* (pp. 44–59). Institut de la Comunicació, Universitat Autònoma de Barcelona.

Morley, D. (2007). *Media, modernity and technology: The geography of the new*. Routledge.

Morley, D. (2010). Domesticating dislocation in a world of 'new' technology. In C. Berry (Ed.), *Electronic Elsewheres. Media, Technology, and the Experience of Social Space* (pp. 3–16). University Minnesota Press.

Morozov, E. (2011). *The net delusion. The Dark Side of Internet Freedom*. PublicAffairs.

Mosco, V. (2009). *The political economy of communication* (2nd ed). SAGE.

Nora, A., & Minc, S. (1978). *L'informatisation de la société*. La Documentation Française.

Orozco, G. (2001). *Televisión, audiencia y educación*. Grupo Editorial Norma.

Pereira, S. (Ed.). (2015). *Digital literacy, technology and social inclusion. Making sense of one-to-one computer programmes around the world*. Edições Húmus.

Proulx, S. (2015). La sociologie des usages, et après? *Revue Française Des Sciences de l'information et de La Communication*, 6. <https://doi.org/10.4000/rfsic.1230>

Ragnedda, M., & Muschert, G. W. (Eds.). (2013). *The digital divide. The internet and social inequality in international perspective*. Routledge.

Robins, K., & Webster, F. (1999). *Times of the Technoculture. From the information society to the virtual life*. Routledge.

Sainz, M. (2008). *Review of the concept digital literacy and its implications in the study of the gender digital divide*. UOC. http://openaccess.uoc.edu/webapps/o2/bitstream/10609/1283/3/sainz_castano_artal.pdf

Sandoval, L. (2019). La apropiación de tecnologías en América Latina: Una genealogía conceptual. *Virtualis*, 10(19), 1–19.

Sannino, A. (Ed.). (2009). *Learning and expanding with activity theory*. Cambridge University Press.

Servaes, J., & Carpentier, N. (Eds.). (2006). *Towards a Sustainable Information Society*. ECCR.

Shirky, C. (2009). *Here comes everybody: The power of organizing without organizations*. Penguin Books.

Silverstone, R. (Ed.). (2017). *Media, Technology and Everyday Life in Europe* (0 ed.). Routledge. <http://doi.org/10.4324/9781315249384>

United Nations General Assembly. (2005). *Resolution adopted by the General Assembly on 16 September 2005*. United Nations. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_60_1.pdf

van Dijk, J. (2020). *The digital divide*. Polity.

Webster, F. (Ed.). (2004). *The information society reader*. Routledge.

Winocur, R. (2013). Una revisión crítica de la apropiación en la evaluación de los programas de inclusión digital. In S. Morales & M. I. Loyola (Eds.), *Nuevas perspectivas en los estudios en comunicación. La apropiación tecno-mediática* (pp. 53–64).

Wolf, M. (1987). *La investigación de la comunicación de masas: Crítica y perspectivas*. Paidós.

Wright, C. R. (1964). Functional analysis and mass communication. In L. A. Dexter & D. M. White (Eds.), *People, society and mass communication* (pp. 91–109). The Free Press.

Published by



ALEXANDER VON HUMBOLDT
INSTITUTE FOR INTERNET
AND SOCIETY

in cooperation with



CREATE



centre
— internet
et —
societe



R&I IN3
Internet
interdisciplinary
Institute
Universitat Oberta de Catalunya



UNIVERSITY OF TARTU
Johan Skytte Institute of
Political Studies