

179 – Sociologia e Filosofia das Tecno-Ciências (3 créditos)

Prof. Frédéric Vandenberghe

Horário: Terça-feira, das 13 às 16 horas

Consultas: A combinar com o professor

Comparação entre abordagens filosófico-normativas e sociológico-descritivas da ciência e da tecnologia. Exames da filosofia da ciência (de Popper a Bhaskar), dos estudos sociais da ciência (de Mannheim a Latour), da filosofia da tecnologia (de Heidegger a Habermas) e da sociologia da tecnologia (de Beck a Latour). Os tópicos abordados incluirão racionalismo/relativismo, etnografias da ciência e das tecno-ciências, a “guerra das ciências” e a sociedade do risco.

1ª Semana: Introdução

1ª Parte: Filosofia das ciências

Bibliografia de apoio (para a 1ª parte):

Chalmers, A.: What is this thing called science?

Brody, R. (Ed.): Readings in the Philosophy of Science

Bernstein, R.: Beyond Objectivism and Relativism

Laudan, L.: Progress and its Problems. Towards a Theory of Scientific Growth

2ª Semana. Do Racionalismo Crítico aos Programas de Pesquisa

Leituras obrigatórias

Popper, K.: Conjectures and Refutations, pp. 33-59, 355-363.

Popper, K.: Poverty of Historicism, pp. 120-135

Lakatos, I. “Falsification and the Methodology of Scientific Research Programmes”, *in* Lakatos, I. e Musgrave, A. (eds.), Criticism and the Growth of Knowledge, pp. 91-138.

Leituras suplementares

Popper, K.: Conjectures and Refutations

Bibliografia de apoio

Popper, K.: The Logic of Scientific Discovery

Popper, K.: Unended Quest. An intellectual autobiography

Popper, K.R.: Objective Knowledge

Hempel, C.: Aspects of Scientific Explanation

Adorno, T. W. et al.: The Postivist Dispute

Passeron, JC: Le raisonnement sociologique. L'espace non popperien de l'argumentation.

Lakatos, I. : Philosophical Papers, 2 vols.

Cohen, R., Feyerabend, P. & Wartofsky, M. (eds.): Essays in Memory of Imre Lakatos

Hacking, I.: "Imre Lakatos's Philosophy of Science", British Journal for the Philosophy of Science, 1979, 30, 381-401.

Larvor, B.: Lakatos. An Introduction.

3ª Semana. Epistemologia histórica francesa

Leituras obrigatórias

Bachelard, G.: A formação do espírito científico: contribuição para uma psicanálise do conhecimento, pp. 7-28.

Bachelard, G. : O novo espírito científico, in Os Pensadores, XXXVIII, pp. 249-257, 316-337.

Foucault, M.: "Sobre a arqueologia das ciências. Resposta ao Círculo de epistemologia", in Ditos & Escritos, II. pp. 82-118.

Leituras suplementares

Bourdieu, P., Passeron, JC. e Chamboredon, J. : O ofício do sociólogo

Bibliografia de apoio

Lecourt, D.: Pour une critique de l'épistémologie

Bachelard, G.: A filosofia do não

Canguilhem, G.: Le normal et le pathologique

4ª Semana. Revolução Científica e Anarquia

Leituras obrigatórias

Kuhn, T.: The Essential Tension, pp. 225-239

Hanson, N. Patterns of Discovery, pp. 1-30.

Feyerabend, P.: Against Method, Intro, cap. 1-5, 18 (Contra o método, pp. 17-99, 447-467)

Leituras suplementares

Kuhn, T.: The Structure of Scientific Revolutions

Bibliografia de apoio

Fleck, L.: Genesis and Development of Scientific Facts
Hacking, I.: Scientific Revolutions
Barnes, B.: T.S. Kuhn and Social Science
Sharrock, W. and Read, R.: Kuhn. Philosopher of Scientific Revolutions
Fuller, S.: Popper vs. Kuhn. The Struggle for the Soul of Science
Gombrich, W.: Art and Illusion

Feyerabend, P.: Philosophical Papers
Feyerabend, P.: Science in a Free Society
Preston, J.: Feyerabend. Philosophy, Science and Society.
Rorty, R.: Philosophy and the Mirror of Nature
Horton, R.: “African Thought and Western Science”, in Wilson, B. (Ed.): Rationality
Hollis, M. & Lukes, S. (eds.): Relativism and Rationality
Winch, P. (1964): “Understanding a Primitive Society”, American Philosophical Quarterly.

5ª Semana. Realismo Crítico

Leituras obrigatórias

Bhaskar, R.: “Feyerabend and Bachelard: Two Philosophies of Reality”, in Reclaiming Reality, ch. 3.
Bhaskar, R.: A Realist Theory of Science, pp. 12-62.

Leituras suplementares

Bhaskar, R.: A Realist Theory of Science
Bhaskar, R.: Reclaiming Reality

Bibliografia de apoio

Archer, M. et al. (eds.): Critical Realism. Essential Readings
Harré, R. & Madden, E.: Causal Powers
Harré, R.: The Principles of Scientific Thinking
Vandenbergh, F.: Teoria social realista. Um dialogo franco-britânico (UFMG, no prelo).

Parte II: Estudos Sociais da Ciência

Bibliografia de apoio (para a 2ª parte)

Lynch, M.: Scientific practice and ordinary action
Knorr-Cetina, K. and Mulkay, M. (Eds.): Science observed
Biagoli, M. (Ed.): The Science Studies Reader
Shapin, S. (1992): “Discipline and Bounding. The History and Sociology of Science as Seen Through the Externalism-Internalism Debate”. *History of Science*, 30, pp. 333-369.
Collins, H. and Pinch: The Golem. What Everybody should know about science
Collins, H. and Pinch, T.: The Golem at large.

6. A Sociologia do Conhecimento + Epistemologia feminista

Leituras obrigatórias

Mannheim, K.: *Ideology and Utopia*, pp. 237-275 (= Ideologia e utopia, cap. 5).
Harding, S. (1993), “Rethinking Standpoint Epistemology: “What is Strong Objectivity?””, in Alcoff, L. e Potter, E. (eds.). *Feminist Epistemologies*, pp. 49-82.
Longino, H.: “Subjects, Power and Knowledge: Description and Prescription in Feminist Philosophy of Science”, in Alcoff, L. e Potter, E. (eds.). *Feminist Epistemologies* pp. 101-120

Leituras suplementares

Mannheim, K.: “Conservative Thought”, pp. 74-164 in *Essays on Sociology and Social Psychology*

Haraway, D. : « Situated Knowledges », in Simians, Cyborgs and Women
Bibliografia de apoio

Lukács, G.: History and Class Consciousness

Mannheim, K.: Karl Mannheim (Col. Grandes Cientistas Sociais), parte II.

Mannheim, K.: Essays on the Sociology of knowledge

Merton, K.: The Sociology of Science (part 1)

Ricoeur, P. : Ideology and utopia

Smith, D. : The Conceptual Practices of Power. A Feminist Sociology of Knowledge.

Alcoff, L. and Potter, E. (eds.) Feminist Epistemologies

Antony, L. and Witt, C. (eds.) A Mind of One’s Own: Feminist Essays on Reason and Objectivity

Keller, E. and Longino, (eds.): Feminism and Science

Harding, S. (ed.): The Feminist Standpoint Theory Reader

7. A Autonomia do Campo Científico

Leituras obrigatórias

Merton, R.: The Sociology of Science. Theoretical and Empirical Investigations, caps. 13 (“The Normative Structure of Science”), 14 (“Priorities in Scientific Discoveries”) e 20 (The Matheus Effect in Science”).

Bourdieu, P. (1975), “The Specificity of the Scientific Field and the Social conditions of the Progress of Reason”. Social Science Information, 14, 6, pp. 19-47 (= O campo científico, pp. 1211-151 in Ortiz, R. (org.): Pierre Bourdieu

Leituras suplementares

Merton, R.: “The Ambivalence of Scientists”, in The Sociology of Science, cap. 18

Bibliografia de apoio

Hagstrom, W.: The Scientific Community.

Cole, J. and Zuckerman, H.: "The Emergence of a Scientific Specialty. The Self-exemplifying Case of the Sociology of Science", in Coser, L. (ed.): The Idea of Social Structure. Papers in Honour of Robert K. Merton

Cozzins: Social Control and Multiple Discoveries

Gieryn, T.: "Boundary Work and the Demarcation of Science from Non-Science: Strains and Interests in professional ideologies of Scientists", American Sociological Review, 1983, 48, 781-795.

Mulkay, M.: "Norms and Ideology in Science", Social Science Information, 1976, 5, pp. 637-656.

Rossiter, M. (1993): "The Matilda Effect in Science", Social Studies of Science, 23, pp. 321-341.

Bourdieu, P.: Science de la science et réflexivité

Bourdieu, P.: Les usages sociaux de la science

Bourdieu, P.: Homo academicus

8. A Nova Sociologia do Conhecimento Científico

Leituras obrigatórias

Bloor, D.: *Knowledge and Social Imagery*, pp. 1-19, 157-161.

Collins, H.: "The TEA-Set: Tacit Knowledge and Scientific Networks". *Social Studies of Science*, 1974, nº 4, pp. 165-186.

Collins, H.: "The Seven Sexes: A Study in the Sociology of a Phenomenon or the Replication of Experiments in Physics". *Sociology*, 1975, nº 9, pp. 205-224.

Collins, H. and Pinch, T.: Frames of Meaning: The Social Construction of Extraordinary Science, ch. 7

Leituras suplementares

Collins, H.: Changing Order. Replication and Induction in scientific Practice

Bibliografia de apoio

Pinch, T. and Collins, H. (1984): « Private Science and Public Knowledge : The Committee for the Scientific Investigation of the Claims of the Paranormal and its Use of the Literature », Social Studies of Science, 1984, 14, 521-546.

Collins, H. (1981): « Son of the Seven Sexes: The Social Destruction of a Physical Phenomenon », Social Studies of Science, 11, 1, pp. 33-62.

9. Teoria do ator-rede

Latour, B. and Woolgar, S.: Laboratory Life, pp. 81-86, 177-183.

Latour, B., (1995), 'The "Pedofil" of Boa Vista: a photo-philosophical montage', in Common Knowledge, Vol. 4 (1), pp. 144-187

Latour, B. (1983) : « Give me a laboratory and I will raise the world", in Knorr-Cetina, K. and Mulkay, M. (eds.) : Science Observed, pp. 141-170.

Latour, B. (1992): "One more turn after the social turn..." in McMullin, E. (ed.): The Social Dimension of Science

Leituras suplementares

Pickering, A. (ed.): Science as Practice and Culture.

Latour, B. (1990), "Drawing Things Together", in Lynch, M. and Woolgar, S. (eds.), Representation in Scientific Practice, pp. 19-68. Cambridge, MA., MIT

Bibliografia de apoio

Cfr. Pagina web de Bruno Latour

<http://www.bruno-latour.fr/>

Cfr. Actor Network Resource Centre at Lancaster University

<http://www.lancs.ac.uk/fass/centres/css/ant/antres.htm>

Woolgar, S. (1988), Science. The Very Idea

Latour, B.: Science in Action

Latour, B.: Aramis, or the Love of Technology

Latour, B.: We have never been modern

Law, J.: "On the methods of long-distance control. Vessels, navigation and the Portuguese Route to India" in Law, J. (ed.): Power, action and Belief.

(Lab studies:

Lynch, M.: Art and Artefact in Laboratory Science

Knorr-Cetina, K.: The Manufacture of Knowledge.

10. A guinada reflexiva

Gilbert, N. e Mulkay, M.: Opening Pandora's Box. A Sociological Analysis of Scientists' Discourse, pp. 1-18.

Woolgar, S.: "What's social about being shot?" in Grint, K. e Woolgar, S.: The Machine at Work, pp. 141-168

Edwards, D., Ashmore, M. e Potter, J. (1995), "Death and Furniture: The Rhetoric, Politics and Theology of Bottom Line Arguments against Relativism", History of the Human Sciences, 8, 2, pp. 25-49.

Leituras suplementares

Sokal, A (1996): “Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity”, Social Text, 46/47, pp. 217-252.
(<http://www.physics.nyu.edu/faculty/sokal/index.html>)

Mulkay, M. (1991), “Textual Fragments on Science, Social Science and Literature”, in Sociology of Science. A Sociological Pilgrimage, pp. 21-36.

Bibliografia de apoio

Potter, S. and Wheterell, M.: Discourse and Social Psychology.

Woolgar, S. (ed.): Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge

Ashmore, M.: The Reflexive Thesis. Wrioting Sociology of Scientific Knowledge.

Ashmore, M., Myers, G. and Potter, J. (1995): « Discourse, Rhetoric, Reflexivity: Seven Days in the Library », in S. Jasanoff (ed.) : Handbook of Science and Technology Studies.

Fuchs, S. (1996): “The new wars of truth: Conflicts over science studies as differential modes of observation”, Social Science Information, 35, 2, pp. 307-326.

Part III. Filosofia e Estudos Sociais da Tecnologia

Mitcham, C. e Mackey, R. (Eds.): Philosophy and Technology (textos de Mumford, Ellul, Jünger, Ortega y Gasset, Dessauer)

Feenberg, A.: Questioning Technology

Stiegler, B.: Technics and time

11. A Essência da Tecnologia

Leituras obrigatórias

Heidegger, M. (2002), “A Questão da Técnica”, in Ensaio e conferencias.

Jünger, E.: “Technology as the Mobilization of the World through the Gestalt of the Worker”, pp. 269-289 in Mitcham, C. e Mackey, R. (eds.): Philosophy and Technology

Leituras suplementares

Heidegger, M.: A origem da obra de arte

Ellul, J.: “The Technological Order”, pp. 86-97, in Mitcham, C. e Mackey, R. (eds.): Philosophy and Technology

Bibliografia de apoio

Ellul, J.: The Technological Society (pp. 77-147).

Winner, L.: Autonomous Technology (ch. 2).

Feenberg, A.: Heidegger and Marcuse

Jonas, H.: O principio da responsabilidade

Naess, A.: “The Shallow and the deep, long range ecological movement. A Summary”, Inquiry, 1973, XVI.

12. Da Tecnologia para a Tecnocracia

Leituras obrigatórias

Marcuse, H.: One Dimensional Man, ch. 6 (Technological rationality and the Logic of domination)

Habermas, J. “Technology and Science as ‘Ideology’”, *in* Toward a Rational Society, pp. 81-122.

Leituras suplementares

Kaczynski, T.: “Industrial Society and its Future” (aka ‘The Unabomber Manifesto’, Disponível na internet)

Bibliografia de apoio

Marcuse, H. (1978), “Some Social Implications of Modern Technology”, *in* Arato, A. e Gebhardt, E. (eds.), The Essential Frankfurt School Reader.

Feenberg, A.: Critical Theory of Technology

Feenberg, A.: “Marcuse or Habermas. Two critiques of technology”, Inquiry, 1996, 39, pp. 45-70

Sloterdijk, P.: Regras para o parque humano: uma resposta a carta de Heidegger sobre o humanismo.

Habermas, J.: O futuro da natureza humana

13. Política na Sociedade de Risco

Leitura obrigatória

Feenberg, A.: “From Essentialism to Constructivism: Philosophy of Technology at the Crossroads,” *in* E. Higgs, D.Strong, and A. Light, eds., Technology and the Good Life. (@<http://www-rohan.sdsu.edu/faculty/feenberg/pub2.htm>)

Beck, U. (1991), Ecological Enlightenment. Essays on the Politics of the Risk Society, pp. 1-18.

Etzkowitz, H. e Leydesdorff, L.: “The Dynamics of Innovation: From national systems and Mode 2 to triple Helix of University-industry-government relations”, Research Policy, 2000, 29, 109-123.

Leituras suplementares

Beck, U.: The Risk Society

Bibliografia de apoio

Beck, U. : Ecological politics in an age of risk

Beck, U. : The World Risk Society

Beck, U. Bonss, W. and Lau, C.: “The Theory of Reflexive Modernization. Problematic, Hypotheses and Research Programme”, Theory, Culture and Society, 2003, 20, 2, pp. 1-33.

Adams, B. Et al. (eds.) : The Risk Society and Beyond: Critical Issues for Social Theory
Vandenberghe, F. : “Introduction à la sociologie (cosmo)politique du risque d’Ulrich Beck”, in Revue du MAUSS, 17, 1, pp. 25-39.

Böhme, G., Van den Daele, W. e Krohn, W.: “Finalization in Science”, Social Science Information, 15, 2/3, pp. 307-330.

Pestre, D.: Science, argent et politique

Michael Gibbons et al: The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies

Minerva, 2003, 41

14. O Pós-humanismo

Leituras obrigatórias

Haraway, D. (1991), “A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century”, in Simians, Cyborgs, and Women, pp. 149-181.

Helman, C.: “Dr. Frankenstein and the Industrial Body”, Anthropology Today, 1998, 4, 3.

Martins, H. (1996): Hegel, Texas – e outros Ensaios de Teoria Social, pp. 167-198.

Leituras suplementares

Vandenberghe, F.: Complexités du posthumanisme (pp. 1-150).

Bibliografia de apoio

Gray, C. (Ed.): The Cyborg Reader

Fukujama, F.: Our posthuman future

De Landa, M.: War in the age of intelligent machines

Hayles, K. : How We Became Post-Human

Sibilia, P. : O homen pós-orgânico

Gorz, A.: O imaterial

Novaes, A. (org.) : Mutações. Ensaios sobre as novas configurações do mundo