

Anthropologie des Wissens

C. Geertz, *Local Knowledge*, o.O., 2000, S. 151-160

- **Ethnography** of thought
- Thought as a **cultural artefact**
- It is to be understood **in terms of activities** that sustain it
- The thought of Russell as well as the thought of an Eskimo is to be understood **ethnographically**
- Sociology of knowledge looks for a **causal arrow connecting society and knowledge**; ethnography of thought grasps thought **directly as a social affair**
- **Diversity** and **locality** of knowledge as central issue
- Scientific disciplines are not only intellectual coigns of vantage, but **ways of being in the world, forms of life, varieties of experience**
- Scientific communities as **face-to-face societies** like **tribal communities** (“intellectual villages” / “peasant villages”)
- Focus on the **verbal particularities of conversations within the community**
- Social, cultural and psychological phenomena **in the context of careers**: passage rites, age and sex role definitions, intergenerational bonds
- **Ritual life** – professional meetings
- All that amounts to “thinking about thought as a **social activity**”



D. Bloor, *Knowledge and Social Imaginery*, Chicago and London, 1991, S. 82-83, 157-161

- What is outside knowledge, what is greater than it, what sustains it, is society
- **Mathematical and logical thinking** as the most stubborn obstacles to the sociology of knowledge
- Objectivity as a **social phenomenon**
- All knowledge is **conjectural** and theoretical; nothing is final → **therefore** all knowledge is **relative** to the local situation of the thinkers who produce it
- Seeing knowledge as **conjectural and fallible** as the most extreme form of **relativism**; there is no need to Truth other than conjectural (=) relative truth; plea for moral and cognitive relativism: what counts are **locally accepted standards**
- The foundation is **culture**; science is our form of knowledge



K. Knorr-Cetina, *Die Fabrikation der Erkenntnis. Zur Anthropologie der Naturwissenschaft*, Frankfurt/Main, 1984, S. 245-270

Die zwei Wissenschaften

- [P.C. Snow]
- In den Naturwissenschaften werden Objekte **transepistemisch, literarisch-institutionell** re/konstruiert
- Darin sind **soziale Interaktionen** verkörpert
- Daher **beide Wissenschaften sozial konstruiert** – Dichotomie verliert ihren Sinn
- Wissenschaftliche Beobachtung **theoriegeladen**
- Essentielle Ähnlichkeit zwischen der Produktion **beider Wissenschaften: symbolisch-interpretative, hermeneutische Praxis, sozial situiert, kontextuell bestimmt**
- These von der **Einheit der Wissenschaft** ist neu (d.h. im Gegensatz zu ihrem positivistischen Modell) zu stellen



Die Universalität von Interpretation und Verstehen

- **Hermeneutisch-symbolischer** Grundcharakter der Wissenschaft: ihre Objekte „existieren“ nicht einfach, sondern werden **konstruiert**
- Wittgenstein: **Sprachspiel** und die darauf bezogene Interpretation als Bedingung der Möglichkeit von Daten
- Kuhn: Normalwissenschaft auf Traditionen und somit auf **inkommensurable Sprachspiele** bezogen
- Allen Daten liegen **Hintergrundtheorien** zugrunde
 - Es gibt keine „**rohen Daten**“ [→ Poincare]
- Der **Theoriegeladenheit** der Beobachtung müsse in den neuen Wissenschaftslogiken Rechnung getragen werden



Die Unterscheidung zw. symbolischem und instrumentellem Handeln

- Naturwissenschaftliches **Forschungshandeln**
- Heidegger: **praktischer Kontext** des wissenschaftlichen Handelns; im Gegensatz zu dessen **nomologischen** und **formal-rationalen** Verständnis



Das Symbolische und das Forschungslabor

- **Forschungshandeln** betrifft die kognitive Seite
- Wissenschaftliche Tatsachen sind Produkte **kulturell spezifischer** menschlicher Interessen und Leistungen
- **Symbolische Formen** der Interaktion und Kommunikation
- **Symbolische Objekte**: Aufzeichnungen von Messinstrumenten, Zahlen, Diagramme...
- Sie müssen „**verstanden**“ werden
- „Das **Zeug** ist weiß geworden“ → „Das **Protein** wurde aufgefällt“
- Die Bedeutung der Messspuren ist unklar; sie muss **herausinterpretiert** werden
- **Sinngebungsprozess**, der **Verhandeln** involviert



Die Feedback-These

- **Labor** als Ort, an dem naturwissenschaftliche Ereignisse durch wissenschaftliche **Sinngabungsprozesse** dynamisch **konstruiert** werden
- Das hat eher mit „**Verstehen**“ als mit „Erklären“ zu tun
- Weil Beobachtung **theoriegeladen** ist und auf **Interpretationen** beruht, setzt sie einen unendlichen Regress [?] von **Vorinterpretationen** voraus
- Naturgesetze – keine konstanten Zusammenhänge tatsächlicher Ereignisse, sondern **Bedingungen und Grenzen der Möglichkeit relevanter Handlungsweisen**
 - **Normative**, transfaktische Aussagen
- Einheit der Wissenschaft: naturwissenschaftliches Handeln = **symbolisches** Handeln; naturwissenschaftliche Rationalität = **interpretative** Rationalität



Kritik

F. A. v. Hayek, *Missbrauch und Verfall der Vernunft*, Salzburg, 1977, S. 120-129

- **Superrationalismus** als Boden für den **Irrationalismus**
- Unser gegenwärtiges Wissen zu „erklären“ (im Hinblick darauf, „woher“ es kommt), würde bedeuten, dass wir **mehr wissen, als wir wissen**
 - Anspruch auf einen „Überverstand“, der von den für Andere geltenden Bedingtheiten ausgenommen wäre
- Irrationalismus: Wissen nicht durch Beobachtung und Argumentation, sondern durch **bevorzugte soziale Position** erreichbar



W. W. Bartley, III, „Alienation Alienated: The Economics of Knowledge versus the Psychology and Sociology of Knowledge“, 1987, a.a.O., S. 432-451

- 434: Studying *objective knowledge* means to be concerned less with the *origin of ideas*.
- The stress lies on *problem situations* (state of discussion, critical arguments), structure, content, growth and use of knowledge.
- Studying knowledge as an *unliving structure created by men* is analogous to studying *unliving structures created by animals*: webs, nests, dams etc.
- 435: Like the path of the deer, objective knowledge exists and can be used *autonomously of its originator*.
- It is a relevant *component of our ecological niche* that transforms that niche.
- It develops in a way analogous to the *evolution of organisms* as well as to the *market order* – as a method of dealing with the lack of total knowledge.



- 435ff.: Knowledge is a product not fully known to its producers.
- 438: The relation of the unfathomable self and the unfathomable theory can hardly be an expression of the one by the other. It is rather a *feedback* amplified by *self-criticism*. It is common to any evolutionary growth process.
- 438f.: Popper & Hayek approve the *objectifying role of theoretical language* vis-à-vis the human subject; Marx condemns it as “*alienation*”. [‘Our products must escape our control.’]
- 441: *Depersonalization of our social relationships* is due to our passing from the *closed* to the *abstract society*. Marx hoped for overcoming that result.



- 442f.: Sociology of knowledge proceeds due to a *subjectivist account of knowledge*.
- Ideas cannot be the *expression of a community* for the same reason that they aren't *expression of a self*.
- Ideas are *autonomous with respect to them* and can sometimes contradict their interests.
- This is due to the *distinctive biological function of ideas*: transcending our earlier selves, allowing the ideas to perish in our stead.



- 451: Education is *more than organized mutual self-expression*.
- It is enactment, reconstruction and creation of culture.
- The teacher presents social units in the marketplace of ideas, where the market acts as a discovery process – as a part of the use of knowledge in society.



17.06.: D. T. Campbell, [1997], "From Evolutionary Epistemology Via Selection Theory to a Sociology of Scientific Validity", ed. by Cecilia Heyes and Barbara Frankel, in: *Evolution and Cognition*, Vol. 3, No. 1, S. 5-38 [besonders relevante Seiten: 7-17, 27-35]

- 9: "... any validity, or usefully competent reference, is attributed to the **selection processes** which **weed out**, rather than to the competence of the **generation processes** producing the variations."
- "if we can ... often validly trust fellow scientists, this is because of **culturally evolved and fragile social systems**, not because of **innate honesty and objectivity**."



- 10: „The end product, knowledge, ... is some **compromise of vehicular characteristics and of referent attributes.**“
- 11: „... **social systems** ... are the vehicles of scientific knowledge. The social glue that holds such groups together has **structure-maintenance requirements** that **limit and bias the portrait of the world** such social groups sustain.“



- 13: “‘Knowledge’ is ‘**not yet defeated**’ belief.”
- 15: “Since 99% of the beliefs of a scientist are solely dependent on the **observations of others**, his makes **social control** of the validity of reporting central to an epistemology of science and to ordinary knowing of social animals...”



- 16: “The term ‘rational’ ... refers to **ideal norms, not causes of behavior.**”
- 27: “Among belief-preserving mutual admiration societies, all of which share ... **common human tribalism, science has different specific values, myths, rituals, and commandments.**”



- 28: “... whereas most belief communities locate truth in a **long-past revelation** ... science’s norms go explicitly counter to this, idealizing truth as lying **in the future** and decrying **tradition as a burden and source of error...**”



M. Bunge, *Treatise on Basic Philosophy*. Vol. 5. *Epistemology & Methodology I: Exploring the World*, Dordrecht / Boston / Lancaster (Reidel), 1983, S. 103-108

Social Matrix

- Knowledge is **social**, because we (like social animals) **learn from each other**
- **Literacy** is a great step forward in this respect
- Owing to this, we are not restricted to **our own** field of experience
- The social character of knowledge is more developed in a **modern** than in a traditional society
- Therefore knowledge cannot be studied by **psychology** alone



- Epistemic **sociologism** is false
 - Society has **no brain**
 - Truth is a semantic and methodological, and **not a sociological** category
- **Three views** of cognition
 - Traditional epistemology
 - Sociologism (brainless social framework)
 - Social neuropsychology



M. Bunge, *Treatise on Basic Philosophy*. Vol. 6. *Epistemology & Methodology II: Understanding the World*, Dordrecht / Boston / Lancaster (Reidel) 1983, S. 241-247

- **Philosophical, sociological and historical study of knowledge**
 - None sufficient
- Social sciences of knowledge
- **Anthropology of knowledge**
 - **Extreme externalism**
 - Studying **behavior** and **small talk** in a laboratory
 - Ignoring that scientific endeavor is **more complicated** than rites in a primitive tribe



- **Sociology** of knowledge
 - **Externalism**
 - **Platonic** and **Hegelian** origin
 - Individual scientist developing the **Zeitgeist**
- **Economics** of knowledge
 - Knowledge **produces** mainly **new knowledge**, and not goods and services
- **Politology** of knowledge
- **History** of science and technology
- **Internalism** (individualism) vs. **externalism** (holism)
- **Systemism** as *tertium quid*



M. Bunge, *Social Science under Debate: A Philosophical Perspective*, Toronto u.a., 1998, S. 225-239

- Internalism vs. externalism
- Moderate/weak local/global externalism
- Radical/strong local/global externalism
- **Radical externalism**
 - Study of Newton's equations tells nothing about **the structure of society**



- **Radical local** externalism
 - Fleck
 - ... if syphilis, why not smallpox?
 - Confusing **facts** with **its accounts**: biological evolution began with Darwin and the universe with astronomy
- **Radical global** externalism
 - Ignores that one and the same stimulus can elicit **different ideas**
 - Attributes to social groups functions of **individual brains**
 - Society cannot deliver, but only **challenge** or **reward** ideas
 - **Totalitarian states** as a case of an influence of social forces upon ideas



- Sociology of knowledge
- Marx and Engels
 - What does it mean, that social being “**determines**” **consciousness**?
- Constructivist and relativist sociologists of science regard themselves as **leftist**, but have embraced a central part of the **Nazi creed**: contempt for pure science



The antiscientific reaction

- Mathematics is **about society**
 - **Dogmatic** statement, not related to any theory of reference: “A refers to *B*”
- Regression to **magical thinking** (no difference between map and territory)
- Epistemological **relativism**
- Critical to **science**, but gullible about **pseudoscience**
- Founded on **irrationalist** philosophies: philosophical hermeneutics, phenomenology and existentialism
- Ignoring interesting problems in the sociology and politology of science



R. Klee, *Introduction to the Philosophy of Science. Cutting Nature at Its Seams*, New York – Oxford: Oxford Univ. Press, 1997, S. 165-174

- **Anthropologist** approach to science
 - Avoiding of “**going native**”
 - Claiming that the products of science refer only to the **process of their production**

- **False assumptions** of the anthropologist approach to science
 - Conflating **propositions** (and facts they refer to) with **propositional attitudes**
 - Kantian fallacy: knowledge of genuinely objective world would have to be **direct** – nonlinguistic and nonconceptual



S. Haack, „Towards a Sober Sociology of Science“, in: *The Flight from Science and Reason*, ed. by Paul R. Gross, Norman Levitt, Martin W. Lewis, Baltimore and London, 1996, S. 259-265

- Considerations of **warrant** vs. considerations of **acceptance**
- Nonexistence of “**the scientific method**”
 - Relevance of **cooperation** and **institutionalized criticism**
 - Their **social conditions** (internal organization of science and social environment in society)



B. R. Gross, „What Could a Feminist Science Be?“, in: *The Monist*, 77, no. 4., S. 434-444

- **Feminist science, Soviet science, Aryan science**
- **Genetic fallacy**
 - Bad, racist, sexist society produces bad, racist, sexist science
 - Changing the nature of society will result in changing the nature of science
 - Bad, racist, sexist society produces bad, racist, sexist transportation system
 - Changing the nature of society will result in changing the nature of the transportation system



I. Niiniluoto, *Critical Scientific Realism*, Oxford, 1999, S. 242-251

- **Genderrelativismus**
 - unterhöhlt den **emanzipatorischen Feminismus**
- **Entdeckungs- vs. Begründungskontext**
- **Marxistische und feministische Erkenntnistheorie**
 - die feministische Erkenntnistheorie entbehrt der „großen Narration“
- **Feministischer Postmodernismus und Konstruktivismus**
 - falsche Annahme, dass **Antifundamentalismus** den **Antirealismus** impliziert
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- **Kritischer, fallibilistischer, wissenschaftlicher Realismus ist mit dem positiven Programm des emanzipatorischen Feminismus kompatibel**
 - Modell der angewandten Sozialwissenschaften: *Willst du G und glaubst, du bist in Situation B, dann sollst du Z tun.*



H. Kornblith, [1994], „A Conservative Approach to Social Epistemology“, in: *Socializing Epistemology. The Social Dimensions of Knowledge*, ed. by Frederick F. Schmitt, Lanham and London: Rowman & Littlefield Publishers, S. 101-108

- Bei der Betrachtung von solchen Institutionen wie Universitäten usw. soll von ihrem Bezug zum Problem der *Wahrheit* nicht abstrahiert werden.



G. Holton, (1995) 2000: *Einstein, History, and Other Passions. The Rebellion against Science at the End of the Twentieth Century*, Cambridge, Mass. – London: Harvard University Press, 23-25, 29-37.

- Conceiving search for **truth** as **fraud** to conceal striving for **power** (career)
 - **Internal** movements of protest against the condition of science vs. cultural politics **from without**
- **Romantic Rebellion**
 - Aryan science
 - Havel



P. R. Gross/ N. Levitt, *Higher Superstition. The Academic Left and Its Quarrels with Science*, Baltimore and London, 1998, S. 57-62.

- “Latour’s picture of science is bleak and ominous: a war of all against all! Science is presented as a **savage brawl** in which, from day to day, the **dominant chieftain** is he who assembles, **by dint of wealth, prestige, and warrior cunning**, the **biggest and nastiest gang of henchmen** (i.e. a “network”, in Latour’s parlance). ... this process is alleged to account for the emergence of **celestial mechanics, Maxwell’s equations, the periodic table of elements, plate tectonics, the genetic code, algebraic topology, quantum mechanics, massive parallel processing**, an a million other insights and advances, modest as well as exalted. **Empirical verification** is dismissed as a species of **bluster**, or as a kind of **collective hallucination** of the **power-crazed**.”



A. Sokal, J. Bricmont, *Eleganter Unsinn*, München, 1999, S. 105-119, 145-154

- Wissen – alles, was für solches **gehalten wird**
– anstatt **wahre Überzeugungen**
- Überzeugungen durch **gesellschaftliche Tatsachen** bedingt
– anstatt dadurch, wie **der zu erforschende Gegenstand** ist
- Keine Unterscheidung zwischen **wissenschaftlichem** und **Alltagswissen**
- **Fakten** und **Wissen über Fakten** durcheinander gebracht

