



Benny Karpatschof,
Ph.d., assoc. Prof.
Psychological Dep.
University of Copenhagen
Njalsgade 94
DK2300 Copenhagen S
benny.karpatschof@psy.ku.dk
2006-07-28

To whom it may concern

As the author and the holder of copyright to the book:

KARPATSCHOFF, B *Human Activity - Contributions to the Anthropological Sciences
from a Perspective of Activity Theory*. Copenhagen: Dansk Psykologisk
Forlag, 2000

I allow all use of the book, including publishing on the www, partial or in full, under the
condition of statement of source.

Benny Karpatschof

A handwritten signature in black ink, appearing to read 'Benny Karpatschof', written in a cursive style.

Table of Contents, front matter, cover

Pp. i- xii IN:

Karpatschof, B. (2000). *Human activity. Contributions to the Anthropological Sciences from a Perspective of Activity Theory*. Copenhagen: Dansk Psykologisk Forlag. ISBN: 87 7706 311 2. (Front, cover + xii + 513 pages).

Re-published with acceptance from the author and copyright-holder.

Benny Karpatschof

HUMAN ACTIVITY

**Contributions to the Anthropological Sciences
from a Perspective of Activity Theory**

**A Dissertation submitted to
the Faculty of Humanities
University of Copenhagen**

Dansk psykologisk Forlag

Benny Karpatschof
HUMAN ACTIVITY
Contributions to the Anthropological Sciences
from a Perspective of Activity Theory

A Dissertation submitted to the Faculty of Humanities
University of Copenhagen October 1997, rev. July 1999

© 2000 Benny Karpatschof and Dansk psykologisk Forlag

1st edition, 1st impression
ISBN 87 7706 311 2

First published in 2000 by
Dansk psykologisk Forlag
Stockholmsgade 29
2100 Copenhagen Ø
www.dpf.dk

Graphic designer: Lone Bjarkow
Cover design: Line Busk
Printed by Nørhaven A/S, Viborg
Printed in Denmark 2000

Cover picture: The picture on the front page has two components, each illustrating the mediators of human activity, that is, tools, signs, cooperation and appropriation. The larger component is a painting from Pharaonic Egypt. For explanatory description see page xi-xii.

The publication of this book was made possible by grants from:
The Danish Research Council for the Humanities.

Denne afhandling er af Det Humanistiske Fakultet ved Københavns Universitet antaget til offentligt at forsvares for den filosofiske doktorgrad.

København den 7. december 1999

John Kuhlmann Madsen
h.a. dec.

Forsvaret finder sted den 1. december 2000, kl. 14.00 på Københavns Universitet, Studiestræde 6, Auditorium A.

All rights reserved. No parts of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

Table of Contents

Preface	ix
Acknowledgements	x
The Cover Picture	xi
Prologue	1
1. Introduction to Human activity – The Intentions, Content and Background of the Book	3
1.1 The Intentions of the Book	3
1.1.1 The Subject Matter of the Treatise	3
1.1.2 The Thesis of the Treatise	5
1.1.3 The Discursive Method of the Treatise – Dialectics	6
1.2 The Content of the Book	9
1.2.0 The Plan of the Book	9
1.2.1 The Remainder of this Chapter	10
1.2.2 Ch. 2, Being and Becoming – Ontology and the Conception of Evolution in Activity Theory	10
1.2.3 Ch. 3, Human Activity – the Anthropology of Activity Theory	11
1.2.4 Ch. 4, Reflection, Transformation and Production of Objects – the Epistemology of Activity Theory	11
1.2.5 Ch. 5, The Meaning of Activity – the Semiotics of Activity Theory	12
1.2.6 Ch. 6, Theory and Practice – Meta-Science from the Perspective of Activity Theory	12
1.3 The Background of Activity Theory	13
1.3.1 Fichte and Schelling	13
1.3.1.1 Fichte	13
1.3.1.2 Schelling	17
1.3.2 Hegel	18
1.3.2.1 Hegel’s Ontology	19
1.3.2.2 Hegel’s Genealogy (Teaching of Evolution)	20
1.3.2.3 Hegel’s Epistemology	21
1.3.2.4 Hegel’s Dialectics	22
1.3.2.4.1 Antidialectics	23
1.3.2.4.2 Dialectics of Knowledge	23
1.3.2.4.3 Dialectics of Activity	23

Part I	Foundation of Activity Theory	79
2.	Being and Becoming – Ontology and the Conception of Evolution in Activity Theory	81
2.1	Ontology	81
2.1.1	To be or not to be	82
2.1.2	Practical Necessity as a Criterion for the Acknowledgement of Existence	84
2.1.3	Categories of Existence	88
2.1.3.1	Object	89
2.1.3.2	Phenomenon	90
2.1.3.3	Essence	95
2.1.3.4	Forms of Existence and Modes of Appearance	99
2.1.3.5	The Dialectics of the Forms of Existence in the History of Science	101
2.2	Conception of Evolution (Genealogy)	105
2.3	Cosmogony, Cosmogogenesis and the Cosmological Object Field	108
2.3.1	The Principle of Causality	111
2.3.1.1	The Metaphysics of Determinism	111
2.3.1.2	The Metaphysics of Thermodynamic Disintegration	115
2.4	Biogony, Biogenesis and the Biological Object Field	117
2.4.1	The Principle of Functionalism	118
2.4.2	Biogony and the Theory of Evolution	119
2.4.3	Biogenesis and the Biological Object Field	121
2.4.4	The Principles of Functionalism and the Controversy about Finalism	124
2.4.4.1	Signals, information and self-regulation	128
2.4.4.2	Animal communication	140
2.4.5	Biogenesis and Evolutionism	144
2.4.6	Psychogonic Theories	150
2.4.6.1	Anthropsychism	150
2.4.6.2	Panpsychism	151
2.4.6.3	Biopsychism	152
2.4.6.4	Neuropsychism	153
2.4.6.5	Kinopsychism	155
2.4.7	The Major Biogenic Leaps	155
2.4.7.1	The Pro-biogenic Leap	156
2.4.7.2	The Biotic Leap	156
2.4.7.3	The Teleologic Leap (Psychogonic according to Engelsted)	156
2.4.7.4	The Sensibility Leap (Psychogonic according to Leontiev)	157
2.4.8	The Psychogenesis of Leontiev	157
2.4.8.0	The Stage of Irritability	158
2.4.8.1	The Stage of Sensibility	158

2.4.8.2	The Stage of Perception	158
2.4.8.3	The Stage of the Intellect	160
2.4.8.4	The Stage of Consciousness	162
2.5	Anthropogony, Anthropogenesis and the Anthropological Object Field ..	163
Notes	.....	168
3.	Human Activity – The Anthropology of Activity Theory	173
3.1	Anthropogony – the Content of the Anthropological Sublation	175
3.2	Methodological Problems in Developing an Anthropology	177
3.2.1	The Problem of Anthropogonic Theories	177
3.2.2	The Status of Culture – Absolute or Relative	179
3.2.3	Anthropogenesis and Cultural Evolution	180
3.2.4	The Human Species, the Human Individuals and the Human Societies	183
3.3	The General Form of Human Activity	184
3.4	Tools (Material Production)	187
3.4.1	The Externalisation of Human Activity	190
3.5	Meaning (Ideal Production)	192
3.5.1	Tools and Meaning as Related Mediators	200
3.5.2	Consciousness as the Psychological Counterpart of Meaning	202
3.6	The Organisation and Division of Human Activity	205
3.6.1	Communication in Human Activity	209
3.7	Transmission of Culture (Education and Appropriation)	211
3.8	The Relation between the Biological and Sociological Object Fields	215
3.8.1	The Relation between Phylogenesis and Sociogenesis in the Evolution of Humankind	215
3.8.1.1	The Pre-anthropoid Stage of Pure Phylogenesis	216
3.8.1.2	The Anthropoid Transition stage –the Dialectics of Natural and Cultural Evolution	217
3.8.1.3	The Anthropic Stage of Pure Sociogenesis	217
3.8.2	Biologism and Anthropism	218
3.9	The Relation between the Human Individual and the Human Society	220
3.9.1	Psychologism and Sociologism	225
3.10	The Meta-scientific Relations of the Anthropological Disciplines	227
Notes	.....	229
Part II	Theory of Knowledge	233
4.	Reflection, Transformation and Production of Objects – The Epistemology of Activity Theory	235
4.1	The Kernel of Truth and the Insufficiency in the Theory of Reflection	242
4.2	The Area of Non-validity in the Theory of Reflection	245
4.2.1	The Semi-dualism of Pictoriality	246

4.3	The Reactivity of Pictuality	247
4.4	An Alternative Conception of Knowledge According to Activity Theory	247
4.4.1	The Object-reflecting Meaning Production	249
4.4.2	The Symmetric Interplay of Object and Meaning Production	250
4.4.3	The Concept-Based Object Production	251
4.4.4	The Dialectics of Anticipation and Reflection in Knowledge	253
4.5	The Dialectics of Theory and Practice in Human Knowledge	255
4.5.1	The Evolution of Cosmological Knowledge	262
4.5.2	The Evolution of Biological Knowledge	263
4.5.3	The Evolution of Anthropological Knowledge	263
4.5.4	The Transitions between the Practical and the Theoretical fields ..	265
4.5.5	The Hidden Involvement of Practice in Question of Theoretical Truth	265
4.5.5.1	Decidability of Theoretical Truth	268
4.5.6	The Relation between Knowledge and the Object field	269
4.5.6.1	Reflection and Reflexivity	269
4.5.6.2	The Relation between Object, Activity and Knowledge in the Areas of Nature – Strict Reflection and no Reflexivity	271
4.5.6.3	The Relation between Object, Activity and Knowledge in the Areas of Humanity – Reflexivity and no Strict Reflection	274
4.6	The Subject of Epistemology – Personal and Public Knowledge	276
4.6.1	Epistemic Individualism – the Decontextualised Person as Epistemic Subject	276
4.6.2	Epistemic Collectivism – the Depersonalised Collective as Subject	278
4.6.3	Epistemic Transcendentalism – the Thought-in-itself as Epistemic Subject	280
4.6.4	Epistemic Activity – the Contextualised Person as Subject	283
4.6.5	The Relation between Personal and Public Knowledge	283
Notes	.....	286
5.	The Meaning of Activity – the Semiotics of Activity Theory ...	289
5.1	The Ontological Status of Meaning	295
5.1.1	Absolute Idealism, the Hypostacy of Meaning in itself	296
5.1.2	Extensionalism, the Hypostacy of the Object	298
5.1.2.1	Montague's Referential Extensionalism	300
5.1.2.2	Davidson's Verificationistic Extensionalism	300
5.1.2.3	The Problems of Extensionalism	302
5.1.3	Formalism, the Hypostacy of the Sign	305
5.1.3.1	Logical Formalism	305
5.1.3.1.1	The Model Theory of Formal Logic	308
5.1.3.1.2	The Inverse Semantics of Montague	308

5.1.3.1.3	The Search for Reality in Situation Semantics ..	310
5.1.3.2	Linguistic Formalism	311
5.1.4	Subjectivism, the Hypostacy of the Subject	314
5.1.4.1	Psychological Subjectivism, the Hypostacy of Consciousness	314
5.1.4.2	Sociological Subjectivism, the Hypostacy of the Meaning System	316
5.1.5	Putnam's Realism as an Integrated Theory of Meaning	318
5.1.6	The Theory of Meaning in the Cultural Historical School	320
5.1.6.1	My own Definition of Meaning	324
5.2	Whole and Part in Semiotics – the Hermeneutical Circle	325
5.2.1	The Componential Semantics of Frege	326
5.2.2	The Holistic Hermeneutics of Gadamer	333
5.2.3	My own Reflections on Part and Whole in Semantics	335
5.3	Meaning and Operation – The Relation between Communicative and Operational Activity	340
5.3.1	The Communication Analysis of Pragmatics	340
5.3.1.2	The Relevance Theory of Sperber and Wilson	342
5.3.2	The Contradiction between Interactionism and Instrumentalism in Activity Theory	344
5.3.2.1	The Meaning (Communication/cognition) Eliminating Operationalism	345
5.3.2.2	Leontiev's Concept of Communication as an Integrated Category within Activity	345
5.3.2.3	Elkonin's Theory of the Duality of Interpersonal and Object-oriented Activity	345
5.3.2.4	Lomow's Interactionistic Version of Activity Theory	345
5.3.3	A Proposal for Integrating Communication and Semiotics into the Theory of Activity	345
5.3.3.1	The Hierarchical Relation between Operational and Meaning-based (Significative) Level of Activity	346
5.3.3.2	The Collateral Relation between the Interpersonal and the Instrumental Aspects of Activity	348
5.4	Individuals and Universals – The meaning of Concepts	350
5.4.1	The Classical Dispute about Universals	351
5.4.1.1	Radical Nominalism	351
5.4.1.2	Moderate Nominalism	352
5.4.1.3	Moderate Realism	353
5.4.1.4	Radical Realism	354
5.4.2	The Status of Concepts in Contemporary Science	355
5.4.2.1	The Ontological Status of Concepts	356
5.4.2.2	The Semantic Status of Concepts	357
5.4.2.3	The Cognitive Status of Concepts	359

5.4.3	The Status of Concepts in Dialectical Philosophy	360
5.4.3.1	Hegel's concepts of concepts	360
5.4.3.2	Marx's Ideas of the Relation between Historical and Conceptual Evolution	362
5.4.3.3	Dawydow's Theory of Concepts	364
5.4.3.4	Concepts According to my own Theory of Meaning	365
5.5	The Semiotic Universe – Logical Classes of Signs	367
5.5.1	A Nature Void of Meaning – The Asemiotic World of the Natural Sciences	369
5.5.2	The Significational Anthropological Field – the Identity of Signs and the Area of Human Activity	372
5.5.3	Specific and Non-specific Signs: the Professionals and the Amateurs of Semiotics	373
5.5.3.1	The Unspecific Signs – Unintended Reference	373
5.5.3.2	The Signs of Natural Science – the Categorical Difference between Sign and Referent in this Domain	376
5.5.3.3	The Activity Signs	377
5.5.3.3.1	The Problem of Fictitious and Misleading Signs – the Power of Human Imagination and the Abyss of Mistaken Reference	378
5.5.3.4	The Signs of Reflexivity – Meta-signs	384
5.6	Semiotics and Dialectics	387
5.6.1	Interactivity and Dialectics	388
5.6.2	Reflexivity and Dialectics	390
Notes	.....	392
6.	Theory and Practice – Meta-Science from an Activity Theoretical Perspective	397
6.1	The General Relation between Theory and Practice	397
6.1.1	The Evolution of Knowledge	399
6.2	The Reflective and Heterologic Nature of the Natural Sciences	404
6.3	The Nature of Technology	406
6.3.1	The General Relation between Technology and Science	406
6.3.2	The Tendency to Progressive Externalisation in Tools and Knowledge	411
6.3.2.1	The Stone Age Culture	411
6.3.2.2	The Bronze Age Culture	412
6.3.2.3	The Culture of Industry	413
6.3.2.4	The Culture of Information Technology	416
6.4	The Case of the Formal Sciences	418
6.4.1	Model Making and Model Use	419
6.4.2	Formal Systems	426
6.4.2.1	Formalism is the Professional "Weltanschauung" of Formal Science	428

6.4.3	A priori and Posteriori in Mathematics	430
6.4.3.1	The Falsity of Kant's Theory of Mathematics and Logic ..	430
6.4.4	The Relation between a Formal System and an Empirical Discipline	431
6.5	The Autology and Reflexivity of the Anthropological Sciences	438
6.5.1	The Autology of Anthropology	438
6.5.1.1	Anthropological Autology as a Methodological Problem ..	442
6.5.1.2	The Concept of Truth in the Anthropological Sciences ...	444
6.5.2	The Reflexivity of Sociological Science	450
6.6	The Human Society and the Human Individual – the Relation between the Anthropological Sister Sciences: Sociology and Psychology	452
6.6.1	The Scope of Anthropology	456
6.7	The Sociology of Activity Theory	458
6.7.1	The Object Field of Sociology(G)	458
6.7.1.1	The Sociological Objects	460
6.7.1.1.1	Sociological Collectivities	460
6.7.1.1.2	Material Products (Tools)	464
6.7.1.1.3	Meaning (Signs)	465
6.7.1.2	Sociological Phenomena	466
6.7.1.3	Sociological Essence	467
6.8	Person and Personality – the Psychology of Activity Theory	467
6.8.1	The Object Field of Psychology	467
6.8.1.1	The Psychological Objects	468
6.8.1.2	The Psychological Phenomenon	469
6.8.1.2.1	The Boundary between Psychological and Sociological Phenomena	470
6.8.1.2.2	The Boundary between Psychological and Biological Phenomena	471
6.8.1.3	The Psychological Essence	473
6.8.2	The Practice Field of Psychology	474
Notes	.....	479
References	.....	483
Name Index	.....	497
Subject Index	.....	501

Preface

This book has been under way for a long time.

I started a year before the fall of the notorious wall, of state bureaucratic Communism, and, according to public opinion, of even Marxist theory. Unwilling to let my own critique of Marxist theory be influenced by this massive ideological backlash, I continued my work as a somewhat lonely follower of the social historical school, in general, and Activity theory, in particular.

Now the book is finally published at the transition to a new millennium, in an Age when the dominant creed within humanities and social science is that knowledge is a social construction. This is, of course, a partial truth, and I willingly recognise that the theoretical movement to which this book is a contribution must be understood as such a construction. In fact, a main agenda of the book is to illuminate how a good foundation for the anthropological sciences can be constructed. As indicated by the picture on the front page, however, I consider theoretical work to be much more than a pure mental construction. The process of anthropological theory is theoretical construction, but its object is the field of Human Activity.

I hope to demonstrate in this book that a durable key to the understanding of Human Activity is a theory that has never been very popular in the Western World, and furthermore has been pushed into near oblivion for the last 10 years. This theory is Activity Theory, and its relevance for the anthropological sciences is the thesis of this book.

Acknowledgements

As mentioned in the preface, writing this book has been a primary part of my activity for more than a decade. It has also been a rather lonely form of activity, in sharp contrast with the human cooperative activity that is so essential according to Activity Theory. There is, however, a large group of people whose help has been most important and often indispensable. From the very start, I worked closely with two friends and colleagues at the former National Educational Institute (now a part of Denmark's Pedagogical University). These colleagues, Svend Thyssen and Vagn Rabøl Hansen, shared their scholarly knowledge on Activity Theory; regrettably, the latter died last year. Together with another psychologist, Mette Bendixen, we contacted Prof. Rückriem and Prof. Messmann at The Institute for General Education, College of Art, in Berlin in order to edit and translate a Danish version of the great Berlin project, the publication of selected works of Leontiev. Both the German and the Danish project failed because of the ill-considered death penalty imposed on any kind of Marxist theory, which was a consequence of the fall of the Berlin Wall.

During the last two decades, I have been a member of a study circle called the Activity Theory Group, which has been gathering monthly in an informal way to discuss subjects within general and applied psychology. This group, consisting of psychologists Erik Axel, Eva Ethelberg, Lone Karpatschhof (who happens to be my wife), Karin Rue, Dorthe Marie Søndergaard and the psychiatrist Anders Kelstrup, has invested at least a year of its program to discuss all the chapters of this book. To have critics that are informed and sympathetic is the dream of any writer.

I have discussed part of the book with several of my colleagues in the Psychology Department at the University of Copenhagen. Accordingly, I had many good discussions with Erik Schultz before delivering the treatise to the faculty that appointed him to be the chairman of the judging committee. From Arne Poulsen I got very useful feedback on chapter 5 (concerning *meaning*). From Niels Engelsted, whose work in general psychology is very close to my

own, I have had almost daily inspiration, from his book as well as from his sharp and witty verbal contributions. From Ole Elstrup Rasmussen I got the original inspiration to study Activity Theory, and I am also indebted to him for his comments about my writings on sociology.

Our Librarian, Lene Seedorff, has always been helpful, effective and creative in getting the sometimes rather esoteric literature I needed. I thank Mette Høyer, a psychologist, for her meticulous proofreading of the book. The extensive cooperation with my English editor, Deborah Licht, much to my relief and astonishment, has turned out to be a very pleasant experience. Besides correcting my numerous grammatical, idiomatic and orthographic blunders, she has even warned me about parts of the text beyond her (and sometimes even my own) comprehension.

Referring to the production of the book itself, I am indebted to my neighbour, the Egyptologist, Torben Holm Rasmussen for his scholarly documentation of the Pharaonic part of the picture on the front page (see below), to the psychiatrist (and part-time artist) Anders Kelstrup for drawing the IT-part of the picture, and to Lone Bjarkow (from the Danish Psychological Publishers) for elevating my amateur text files to a professional graphical standard, with the skill and dedication I have appreciated for many years while collaborating with her publishing the journal *Psyke & Logos*.

The Cover Picture

The picture on the front page has two components, each illustrating the mediators of human activity, that is, tools, signs, cooperation and appropriation. The larger component is a painting from Pharaonic Egypt. I got the following description from my neighbour, an Egyptologist, Torben Holm Rasmussen, M.A.:

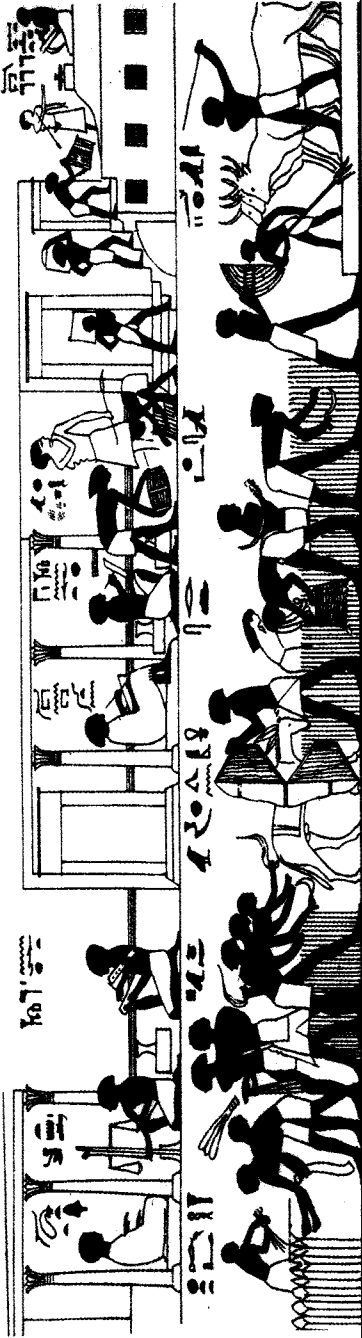
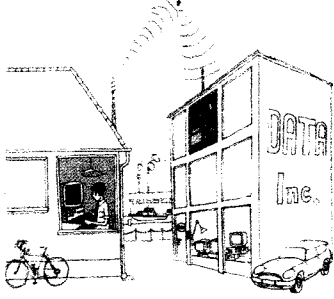
Khnumhotep II was nomarch (governor) over the Gazelle nome (region) during the reign of Pharaoh Amenemhet II (1929-1892 BC). The picture is a painting on stucco found in the tomb of Khnumhotep II, which is situated at Beni Hasan near the town El Minya on the east bank of the Nile about 270 km south of Cairo. In the lower part of the picture, the basic activity is shown, that

is, agriculture leading to the harvest of the crop. In the upper part, officials are rendering an account to one of Khnumhotep's leading official Baket, "principal of the keepers of the seals". A subordinate official is sitting at the scales, while the scribe, Netjernakht, is rendering an account. Baket is sitting on a raised platform wrapped in a cloak. The scene in the middle shows the steward (also sitting on a raised platform) counting the number of bushels of grain. The grain is carried to the granary in the scene to the right. It should be noted that the title "scribe" also referred to the people who functioned as what we would call *accountants*.

The magical power of art allows the cultural content of the picture, the depicted activities, to be maintained forever. The work on Khnumhotep's estate thus continues, and he therefore will get his supplies in his afterlife. There is, however, also an additional meaning. These pictures that include daily activities can be seen as a testimony that Khnumhotep has fulfilled his duty as a high ranking official; he has worked as a prominent official to maintain *Ma'at*. *Ma'at* is an important Egyptian concept denoting "the order of society, justice, the harmony of society". The scribe/accountant had an important and highly esteemed position in the Ancient Egyptian Society. Only a small proportion of the population had the knowledge of reading and writing at this time (the Middle Kingdom).

The smaller component of the picture on the front page depicts contemporary activity, with two employees working and possibly communicating by means of the prime mediator of our time, the PC, which is simultaneously a *tool*, a medium of producing and preserving *signs*, a mediator of *cooperation*, and even a means of *appropriation*.

BENNY KARPATSCHOFF



Human Activity

Contributions to the
Anthropological Sciences from a
Perspective of Activity Theory

DANSK PSYKOLOGISK FORLAG

After an investigation of the philosophical foundation of Activity Theory, the book undertakes an assessment of the adequacy of this theory as a framework for the anthropological sciences. The thesis is that the perspective of Human Activity is "a key to solving basic problems found in epistemology, anthropology, sociology, psychology, semiotics, and even in the study of science itself.

Human Activity is defined as a *mediated form of activity*, and has *Tools, Signs, Cooperation and Appropriation* as its prime mediators. Each of the 6 chapters of the book provides a specific perspective on the general subject, Human Activity, and on the general theory, Activity Theory.

The first chapter introduces the historical background of Activity Theory, including the evolution of the theory from Hegel to Marx and the two Russian psychologists Vygotsky and Leontiev. Ch. 2 covers the basic problems of ontology and evolution; the ontology assumes an original cosmological object field, from which a biological field emerged, and from the latter an anthropological object field emerged. Ch. 3 analyses the relation between *pre-human activity*, belonging to the biological object field, and *human activity*, belonging to the anthropological field, the characteristics of which are discussed. In Ch. 4, epistemology is discussed from the perspective of human activity. Ch. 5 attempts to clarify the problem of *meaning*, and in this connection the leading theories in semiotics and language theory are discussed. Finally, Ch. 6 is dedicated to the *study of science*, that is, the discipline of Metascience. Themes treated in this chapter include: the relation between technological and scientific evolution, the status of the formal sciences, and the difference between the natural and the anthropological sciences, in particular psychology.

The book is recommended for scholars with an interest in Activity Theory, Philosophy of Science and Psychology.

The author is a member of the Psychology Department at the University of Copenhagen and the book is his doctoral dissertation.



DANSK PSYKOLOGISK FORLAG

ISBN 87 7706 311 2

