

XI - n. 2/2012 (supplement)

Salute e Società

Medicine of emotions
and cognitions

edited by

Antonio Maturo
Kristin Barker



FrancoAngeli

Salute e Società

Medicine of emotions
and cognitions

edited by

Antonio Maturò

Kristin Barker

FrancoAngeli

The journal is published on behalf of Università degli Studi di Bologna



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Scientific Board

Achille Ardigò† (President), Augusto Balloni, Domenico Berardi, Patrizio Bianchi, Ivan Cavicchi, Vincenzo Cesareo, Gianluigi Cetto, Daniela Cocchi, Nicola Comodo, Paolo De Nardis, Flavio Delbono, Pierpaolo Donati, Carla Faralli, Silvio Garattini, Mariapia Garavaglia, Riccardo Gatti, Leopoldo Grosso, Rossella Levaggi, David Mechanic, Aldo Morrone, Umberto Nizzoli, Marco Patierno, Alfredo Reborra, Giuseppe Remuzzi, Paolo Roberti di Sarsina, Alex Robertson, Giovanni B. Sgritta, Francesco Taroni, Marco Trabucchi, Paolo Vanni, Paolo Vineis, Bruna Zani.

Editorial Board

Costantino Cipolla (Scientific Editor in chief), Leonardo Altieri, Cleto Corposanto, Guido Giarelli, Sebastiano Porcu, Alessandra Sannella (NIHMP Delegate), Paolo Ugolini (SISS Delegate), Roberto Vignera (AIS Delegate).

Technical-Scientific Committee

Antonio Maturo (Scientific Secretary), Linda Lombi (Scientific Coordinator), Agnese Accorsi, Veronica Agnoletti, Alessia Bertolazzi, Francesca Guarino, Maurizio Esposito, Ilaria Iseppato, Lorella Molteni, Luca Mori, Fabio Piccoli, Elisa Porcu, Alice Ricchini.

Editorial

Annamaria Perino (Advisor), Anna Apicella, Roberto Battilana, Rosemarie Callà, Sara Capizzi, Gerardo Catena, Antonio Chiarenza, Francesca Cremonini, David Donfrancesco, Elena Elia, Laura Farneti, Stefania Florindi, Ivo Germano, Barbara Ghetti, Rossana Giacomoni, Carlo Antonio Gobbatto, Maura Gobbi, Silvia Lolli jr, Silvia Lolli sn, Luigi Mazza, Lorenzo Migliorati, Cecilia Morelli, Lara Nanetti, Andrea Paltrinieri, Nicoletta Poppi, Francesca Rossetti, Alessandra Rota, Roberta Russo, Elisabetta Scozzoli, Nicola Strizzolo, Rossella Trapanese, Marco Venturini, Valeria Verdolini, Susanna Vezzadini, Angelo Villini, Fabio Voller.

Local Scientific Unit

UNIVERSITY UNITS: *Università di Ancona* (Scientific Coordinator: Maria Giovanna Vicarelli; Scientific Secretary: Sabrina Dubbini); *Università di Cassino* (Coord. Scient.: Francesco Maria Battisti; Segr. Scient.: Paolo Russo); *Università di Catanzaro* (Coord. Scient.: Guido Giarelli; Segr. Scient.: Eleonora Venneri); *Università Cattolica di Milano* (Coord. Scient.: Clemente Lanzetti; Segr. Scient.: Rita Bichi); *Università di Palermo* (Coord. Scient.: Antonio La Spina; Segr. Scient.: Fabio Massimo Lo Verde); *Università di Roma III* (Coord. Scient.: Roberto Cipriani; Segr. Scient.: Luca Diotallevi); *Università di Salerno* (Coord. Scient.: Tullia Saccheri; Segr. Scient.: Giuseppina Cersosimo); *Università di Sassari* (Coord. Scient.: Alberto Merler; Segr. Scient.: Remo Siza); *Università di Siena* (Coord. Scient.: Roberto De Vita; Segr. Scient.: Fabio Berti); *Università di Torino* (Coord. Scient.: Willem Tousijn; Segr. Scient.: Vincenzo Giorgino); *Università di Trento* (Coord. Scient.: Antonio Scaglia; Segr. Scient.: Davide Galesi); *Università di Trieste* (Coord. Scient.: Alberto Gasparini; Segr. Scient.: Daniele Del Bianco); *Università di Verona* (Coord. Scient.: Mauro Niero; Segr. Scient.: Cristina Lonardi).

INSTITUTIONAL UNITS: *ASR Abruzzo* (Coord. Scient.: Francesco di Stanislao; Segr. Scient.: Alessandra Rosetti); *ASR Emilia-Romagna* (Coord. Scient.: Roberto Grilli; Segr. Scient.: Marco Biocca); *ASR Friuli Venezia-Giulia* (Coord. Scient.: Lionello Barbina; Segr. Scient.: Laura

Minin); *ARS Marche* (Coord. Scient.: Maurizio Belligoni; Segr. Scient.: Andrea Gardini); *ASR Toscana* (Coord. Scient.: Stefania Rodella; Segr. Scient.: Stefano Beccastrini); *Arsan Campania* (Coord. Scient.: Tonino Pedicini; Segr. Scient.: Enrico de Campora); *Associazione Stampa Medica* (Coord. Scient.: Giancarlo Calzolari; Segr. Scient.: Filippo Calzolari); *Azienda Ospedaliera di Padova* (Coord. Scient.: Patrizia Benini; Segr. Scient.: Silvana Bortolami); *CERFE* (Coord. Scient.: Marco Montefalcone; Segr. Scient.: Daniele Mezzana); *Collegi IPASVI* (Coord. Scient.: Gennaro Rocco; Segr. Scient.: Alessandro Stievano); *CUP 2000* (Coord. Scient.: Mauro Moruzzi; Segr. Scient.: Giulia Angeli); *Federfarma Emilia-Romagna* (Coord. Scient.: Domenico Dal Re; Segr. Scient.: Dante Baldini); *Fondazione Cesar* (Coord. Scient.: Giancarlo Brunello; Segr. Scient.: Giulia Zamagni); *Ospedale San Martino - Genova* (Coord. Scient.: Loredana Sasso; Segr. Scient.: Rita Rosso); *Osservatorio Metropolitano Dip. Patologiche - Ausl Bologna* (Coord. Scient.: Raimondo Pavarin; Segr. Scient.: Silvia Marani).

International Advisory Editor

Cecilia M. Benoist (University of Victoria, Canada), John J. Bruhn (New Mexico State University, Usa), Peter Conrad (Brandeis University, Usa), Mary Fennell (Brown University, Usa), Eugene B. Gallagher (University of Kentucky, Usa), Siegfried Geyer (Università di Hannover, Germania), Claudine Herzlich (CERMES, Parigi, Francia), David Hughes (University of Swansea, Gran Bretagna), Inez Johansson (University College of Health Sciences, Jönköping, Svezia), David J. Kallen (Michigan State University, Usa), Donald Light (University of Medicine & Dentistry, New Jersey, Usa), Linda Montanari (Osservatorio Europeo Droghe e Tossicodipendenze, Lisbona, Portogallo), Jake Najman (University of Queensland, Australia), Jürgen Pelikan (Università di Vienna, Austria), Mike Sacks (De Montfort University, Leicester, Gran Bretagna), Josep A. Rodríguez (Università di Barcelona, Spagna), Mauro Serapioni (Universidade Estadual do Ceará, Brasile), Ulrich Stöessel (Università di Friburgo, Germania), Silvia Mamede Studart Soares (Universidade Federal do Ceará, Brasile), Hilary Thomas (University of Hertfordshire, Gran Bretagna), Göran Tomson (Karolinska Institute, Stoccolma, Svezia), Andrew Twaddle (University of Missouri-Columbia, Usa).

Manuscripts are blind-reviewed by two anonymous referees.

Scientific Editor in chief

Costantino Cipolla, Dipartimento di Sociologia, Strada Maggiore 45, 40125 Bologna
tel. 051/2092858-0543/374205
www.salutesocieta.com

Technical-Scientific Committee

Scientific Secretary: Antonio Maturo, Facoltà di Scienze Politiche, via G. della Torre 1, 47100 Forlì
tel. 0543/374207, e-mail: facscpol.salutesocieta@unibo.it

Editorial Coordinator

Anna Buccinotti, e-mail: buccinotti@francoangeli.it

For Info

FrancoAngeli srl, viale Monza 106, 20127 Milano, tel. 02/2837141
Ufficio abbonamenti: fax 02/2895762, e-mail: riviste@francoangeli.it
www.francoangeli.it

Autorizzazione del Tribunale di Milano n. 137 del 6 marzo 2002 - Quadrimestrale - Direttore responsabile: Stefano Angeli - Poste Italiane Spa - Sped. in Abb. Post. - D.L. 353/2003 (conv. in L. 27/02/2004 n. 46) art. 1, comma 1, DCB Milano - Copyright 2012 by FrancoAngeli srl - Stampa: Tipomonna, via Merano 18, Milano.

Copy Editing by Sara Sbaragli.

Copyright © FrancoAngeli

N.B: Copia ad uso personale. È vietata la riproduzione (totale o parziale) dell'opera con qualsiasi mezzo effettuata e la sua messa a disposizione di terzi, sia in forma gratuita sia a pagamento.

Salute e Società. Confronti. Numeri usciti e curatori

2002

Costantino Cipolla, Guido Giarelli, *Dopo l'aziendalizzazione. Nuove strategie di governance in sanità* (a. I, n. 1)

Leonardo Altieri, *Ascolto e partecipazione dei cittadini in sanità* (a. I, n. 2)

Gruppo Cerfe, *Per una interdipendenza attiva tra Nord e Sud del pianeta* (a. I, n. 3)

2003

Giorgino Enzo, Willem Tousijn, *Attraversando terre incognite: una sfida per la professione infermieristica* (a. II, n. 1)

Mauro Moruzzi, Antonio Maturo, *e-Care e Salute* (a. II, n. 2)

Tullia Saccheri, *Prima che ... Promozione della salute e responsabilità istituzionali* (a. II, n. 3)

2004

Giovanna Vicarelli, *Il paradigma perduto? Medici nel duemila* (a. III, n. 1)

Cinzia Conti, Giovanni B. Sgritta, *L'immigrazione e politiche socio-sanitarie. La salute degli altri* (a. III, n. 2)

Società Italiana di Sociologia della Salute, *La sociologia della salute in Italia: temi, approcci, spendibilità - The Sociology of Health in Italy: Topics, Approaches, Practicability* (a. III, n. 3 - numero bilingue italiano-inglese)

Mauro Moruzzi, Costantino Cipolla, *Telemedicina* (a. III, n. 3 - Supplemento)

2005

Paola Maria Fiocco, Luca Mori, *La disabilità tra costruzione dell'identità e cittadinanza* (a. IV, n. 1)

Rosanna Memoli, *Dimensioni socio-sanitarie dell'ambiente* (a. IV, n. 2)

Domenico Secondulfo, *Medicina Medicine. Le cure "altre" in una società che cambia* (a. IV, n. 3)

2006

Guido Giarelli, Siegfried Geyer, *Prospettive europee sui sistemi sanitari che cambiano* (a. V, n. 1 - Supplemento)

Carlo Borzaga, Luca Fazzi, *Del non profit sociosanitario* (a. V, n. 1)

Raffaele Rauty, *Le contraddizioni del corpo: presenza e simbologia sociale* (a. V, n. 2)

Sergio Belardinelli, Leonardo Allodi, Ivo Germano, *Bioetica del dolore* (a. V, n. 3)

2007

Marco Ingrosso, *Fra reti e relazioni: percorsi nella comunicazione della salute* (a. VI, n. 1)

Costantino Cipolla, *Il consumo di sostanze psicoattive oggi* (a. VI, n. 1 - Supplemento/Numero speciale in occasione del V anno di *Salute e Società*)

Francesca Guarino, Licia Mignardi, *Tecnologie a rete per la salute e l'assistenza* (a. VI, n. 2 - supplemento)

Cleto Corposanto, *Sulla valutazione della qualità nei servizi sociali e sanitari* (a. VI, n. 2)

Andrea Gardini, *L'ospedale del XXI secolo* (a. VI, n. 3)

2008

Augusto Balloni, Roberta Bisi, *Processi di vittimizzazione e reti di sostegno alle vittime* (a. VII, n. 1)

Nicola Porro, Sergio Raimondo, *Sport e salute* (a. VII, n. 2)

Francesco Maria Battisti, Maurizio Esposito, *Cronicità e dimensioni socio-relazionali* (a. VII, n. 3)

2009

Giuseppe Costa, Cesare Cislaghi, Nicola Caranci, *Le disuguaglianze sociali di salute. Problemi di definizione e di misura* (a. VIII, n. 1)

Ilaria Iseppato, Simona Rimondini, *Le reti dell'accesso per la sanità e l'assistenza* (a. VIII, n. 1 - Supplemento)

Antonio Maturo, Peter Conrad, *La medicalizzazione della vita - The Medicalization of Life* (a. VIII, n. 2 - numero bilingue italiano-inglese)

Costantino Cipolla, Mauro Moruzzi, Achille Ardigò e *la sociologia della salute* (a. VIII, n. 2 - Supplemento)

Donatella Cavanna, Luisa Stagi, *Sul fronte del cibo. Corpo, controllo, soggettività* (a. VIII, n. 3)

Società Italiana di Sociologia della Salute, *Essere e Fare il sociologo in sanità* (a. VIII, n. 3 - Supplemento)

2010

- Alberto Marradi, Daniele Nigris, *Evidence-Based Medicine: una critica* (a. IX, n. 1)
Roberto Cipriani, *Narrative-Based Medicine: una critica* (a. IX, n. 2)
Guido Giarelli per la Eshms, *Metodologie di ricerca comparata in Sociologia della salute e della medicina - Comparative Research Methodologies in Health and Medical Sociology* (a. IX, Suppl. al n. 2 - numero bilingue italiano-inglese)
Mauro Giacca, Carlo Gobatto, *Polis genetica e società del futuro - Polis genetica and society of the future* (a. IX, n. 3 - numero bilingue italiano-inglese)
Franco Prina, Enrico Tempesta, *I giovani e l'alcool: consumi, abusi, politiche. Una rassegna critica multidisciplinare - Youth and Alcohol: Consumption, Abuse and Policies. An Interdisciplinary Critical Review* (a. IX, Suppl. al n. 3 - numero bilingue italiano-inglese)
Guido Giarelli, Roberto Vignera, *Sociologia e sociologia della salute: andata e ritorno - Sociology and sociology of health: A round trip* (a. XI, n. 2 - numero bilingue italiano-inglese)

2011

- Carmine Clemente, Giuseppina Cersosimo, *La fine pre-scelta. Forme e disposizioni sulla propria morte - The pre-chosen death. End of life arrangements and instructions* (a. X, n. 1 - numero bilingue italiano-inglese)
Leonardo Altieri, Maria Augusta Nicoli, Vittoria Sturlese *La sanità dei cittadini - Citizens' health services* (a. X, n. 2 - numero bilingue italiano-inglese)
Mauro Niero, Giovanni Bertin, *Vulnerabilità e fragilità sociale. Una teoria delle disuguaglianze di salute - Vulnerability and social frailty. A theory of health inequalities* (a. X, n. 3 - numero bilingue italiano-inglese)

2012

- Fosco Foglietta, Franco Toniolo, *Nuovi modelli di governance e integrazione socio-sanitaria - New models of governance and health system integration* (a. XI, n. 1 - numero bilingue italiano-inglese)
Guido Giarelli, Roberto Vignera, *Sociologia e sociologia della salute: andata e ritorno - Sociology and sociology of health: A round trip* (a. XI, n. 2 - numero bilingue italiano-inglese)
Antonio Maturò, Kristin Barker, *Medicina delle emozioni e delle cognizioni - Medicine of emotions and cognitions* (a. XI, Suppl. al n. 2 - numero bilingue italiano-inglese)

Numeri programmati e curatori

2012

- Carla Faralli, *Consenso informato - Informed consent* (a. XI, n. 3 - numero bilingue italiano-inglese)
Franca Orletti, Marilena Fatigante, *La sfida della multiculturalità nell'interazione medico-paziente - The challenge of multiculturalism in patient-physician interaction* (a. XI, suppl. al n. 3 - numero bilingue italiano-inglese)

2013

- Elisabetta Ruspini, *Sessualità, salute, istituzioni. Dalle pratiche di controllo ai percorsi educativi - Sexuality, health, institutions: From control practices to educational pathways* (a. XII, n. 1 - numero bilingue italiano-inglese).
Gennaro Rocco, Alessandro Stievano, *Scenari plurali dell'assistenza infermieristica - Multiple scenarios in nursing care* (a. XII, n. 2 - numero bilingue italiano-inglese)
Rita Biancheri, *Genere e salute - Gender and health* (a. XII, n. 3 - numero bilingue italiano-inglese)

Contents a. XI, n. 2 Supplement, 2012

EDITORIAL

- 11** Piet Bracke

INTRODUCTION

- 13** Antonio Maturo and Kristin Barker

THEORY

- 15** Antonio Maturo
Social Justice and Human Enhancement in Today's Bionic Society
- 31** Johanne Collin, Julien Simard, and Hugo Collin-Desrosiers
Between smart drugs and antidepressants: A cultural analysis of pharmaceutical drug use among university students
- 56** Stephen Katz and Kevin Peters
Enhancing the mind? Memory medicine, dementia, and the aging brain
- 77** Annette Schnabel, Carita Bengs, and Maria Wiklund
Modernity, Stress and the Quest for Emotional Self-management

DISCUSSION

- 95** *Cognitive enhancement: scenario, perspectives and dilemma*
Linda Lombi
ROUND TABLE WITH: Frans Brom, Ira van Keulen, Ori Lev, and Mauro Turrini

EXPERIENCES

- 111** Meika Loe and Leigh Cuttino
Ambivalent users.
Strategic Pharmaceutical Use and Identity Management among ADHD College Students
- 138** Davide Galesi
The pharmacologization of loneliness and insecurity

DEBATE

- 151** Catherine Coveney, Jonathan Gabe, and Simon Williams
Boosting brainpower? From the medicalisation of cognition to the pharmaceuticalisation of routine mental life

COMMENTS

- 167** Kristin Barker
Pharmaceuticalisation: What is (and is not) medicalisation?
- 173** Jonathan Kaplan
From Medicalization to Biolooping: Reflections on “Boosting brainpower?”

- 177** Francesca Minerva
Medicalisation, biomedicalisation and pharmaceutisation from a sociological and from a bioethical perspective

REVIEWS

- 183** Donatella Simon
Alain Ehrenberg
The society of uneasiness

NOTES

- 191** INTERVENTIONS
Paola D'Incau, Monia Donati, Corrado Barbui, Anna Carreri, Jacopo Tubini, and Anita Conforti
Stressfull life events and psychiatric drugs.
An observational study conducted in the pharmacies of Veneto Region
- 205** Alessia Bertolazzi and Nicola Strizzolo
Beyond the scientific reductionism on drug consumption
- 210** Luca Mori and Linda Lombi
A critical thinking on social disapproval and marijuana use
- 215** Cleto Corposanto
What indicators to evaluate the association of general medicine doctors and paediatricians?

EDITORIAL

by Piet Bracke*

Health sociology is a vibrant field of research going from global health studies, the macrosociology of health and illness, over sociological epidemiology, health services research, the sociology of professional care seeking to the sociology of cognitions and emotions. Because health has obvious bodily, cognitive, affective, and, social connotations the sociology of health and illness is one of the more interdisciplinary oriented fields in sociology.

This cross border orientation is stimulated by the fact that a lot of health sociologists work in faculties of medicine instead of departments of sociology. Therefore, they are challenged to make their research relevant for medicine, clinical psychology, health promotion, and other disciplines located at the same faculty. This comes with a drawback too, as often their research disconnects health sociological problems from the core of sociology as a discipline.

Only a few domains of health sociological research seem to circumvent this dilemma, and the sociology of medicalization seems one of them, although its subject is not health behavior as such, but the changing definitions of health and health behavior, its relevance for all health research is obvious and growing¹. Social conditions are increasingly being evaluated by their consequences for health and wellbeing and medicalization theory thrives by this cultural evolution it vehemently criticizes itself. The field also shows admiring resilience, not because it still holds on to the ideas of its founding fathers, but because it seems able to transform itself constantly, from traditional medicalization theory and

* President of the European Society for Health and Medical Sociology and Professor of Sociology at Ghent University.

1. Conrad P. and Schneider J.W. (1980). *Deviance and medicalization. From badness to sickness*. St. Louis: The C.V. Mosby Company.

studies of medical imperialism, over medicalisation as iatrogenesis, to studies on medicalization as the optimalisation of normal characteristics².

The arrival of a sociology of the medicine of cognitions and emotions is part of this last wave of medicalization research and helps to refresh the field. It directly relates to the sociology of emotions and identities, and therefore to sociological social psychology in general. Also, as a sociology of social change, it links the personal to the global. Its sub domain of the pharmaceuticalisation of normal behavior connects the sociology of mental health to issues about biotechnology, neurochemicals and identities. This new field of research does not reduce the person to the structure and the function of the brain – as neuropsychology does, and thereby drives out psychology as a relevant field of study but reflects on how biotechnological innovations, that allow for the control of emotions and cognitions, transform identities in late modern societies.

I already made reference to a publication from a special edition of *Salute e Società* on *The medicalization of life* edited by Antonio Mauro and Peter Conrad to show that this flagship of Italian health sociology has never neglected medicalization theory as a vibrant field of research.

The present special issue of *Salute e Società* on the medicine of cognitions and emotions is a welcomed continuation of this tradition. It will contribute to the further development of the second wave of medicalization research in Europe and get its voice heard within the entire health sociological community. As the present president of the European Society for Health and Medical Sociology I hope that it will not only help to strengthen the community of European health sociologists by stimulating debate and generating new insights, but that it will also contribute to the transformation all health scientists' view on the surprising intermix between biotechnology, identities, cognitions, and emotions.

2. Christiaens W. and van Teijlingen E. (2009). Four meanings of medicalization: childbirth as a case study. *Salute e Società* 8, 2: 123-141.

INTRODUCTION

by Antonio Maturo and Kristin Barker*

Technological advances allow us to do things that were inconceivable only a few years ago. In turn, medicalization has become an increasingly relevant theoretical concept. However, theoretical reflections about medicalization are scrambling to keep pace with medicine's ongoing technological pursuits. Medical "progress" transforms the way we frame reality. As Illich, Zola, Foucault and Conrad have shown, medicalization is not only a practice, but also a discourse and a language. This special issue examines the myriad ways that medical practice, discourse, and language continue to be transformed before our very eyes and in turn influence processes of medicalization. We focus specifically on the medicalization of emotions and cognition.

In practical terms, the idea for this volume crystallized in May 2011 when Antonio Maturo was invited to give a lecture at Oregon State University (OSU) by Kristin Barker. We had previously discussed the possibility of pursuing this topic and project at the US-UK Medical Sociology conference held in Boston, MA in 2008, but after Maturo's lecture at OSU, and a day-hike in the Oregon wilderness in the unrelenting rain, our plans for this special issue solidified.

Biology and neurology provide us with a lexicon by which we discover/construct new pathological phenomena and features of the human condition which can be improved via technological intervention. But, along with the classical aspects of medicalization, like those related to disease mongering, there is also the issue of enhancement. Human enhancement involves medical interventions into normal (not pathological) bodily processes. In this regard the cultural omnipresence of pharmaceuticals is highly relevant.

* Antonio Maturo, Associate Professor of Sociology of Health at the University of Bologna and Regular Visiting Professor at Brown University; Kristin Barker, Associated Professor of Sociology of Health at the University of New Mexico.

Corresponding author: Antonio Maturo, antonio.maturo2@unibo.it

Pharmaceuticals are increasingly used to transform our mood (i.e., emotions) and our mental performances (i.e., cognition) above and beyond those states that are deemed medically pathological. We take medications to modify our nature. Our *bios*, that is our biological essence, becomes something which can medically manipulate. In recognition of this state of affair, some scholars suggest that the concept *pharmaceuticalization* may provide more theoretical leverage than medicalization per se.

Cognitive enhancement is a central theme in this volume. For example, Johanne Collin, Julien Simard and Hugo Collin-Desrosiers present interesting research about the ways in which college students in Montreal use drugs to improve cognitive performance and mood. Coveney, Gabe and Williams refer to the case of cognitive enhancement to introduce the concept of pharmaceuticalization. Kristin Barker, Jonathan Kaplan and Francesca Minerva, each individually offer their own insights by commenting on the Coveney *et al.* article. Cognitive enhancement is also at the center of the round table coordinated by Linda Lombi and participated in by Frans Brom, Ira van Keulen, Ori Lev and Mauro Turrini.

Meika Loe and Leigh Cuttino present their qualitative research on the management of identity carried out by college students with a ADHD diagnosis, a controversial condition in United States as well as other nation states. The scholars of Umeå – Carita Bengs, Annette Schnabel and Maria Wiklund – have done similar research on the relationships between identity, stress and emotions. Stephen Katz and Kevin Peters explain the bias in trials for Mind Mental Disorder, while Davide Galesi presents innovative data concerning increasing psychopharmaceutical consumption in North Italy. Antonio Maturo writes about the consequences of cognitive enhancers in terms of social justice and equity.

We would like to thank all of our authors for contributing to this volume of *Salute e Società*. Also, we would like to thank the young Italian scholars who did the translations for all their hard work. Also, we are pleased that we have been able to involve sociologists and other scholars from many different nations including Italy, the United States, Canada, Great Britain, Sweden, Germany, and Holland. In the end we think we have put together an original and innovative product.

In the field of sociology, a book focused on the social aspects of mood and cognitive enhancement has yet to be written. We hope this topic will continue to be analyzed through a sociological lens and in turn advance the subfield of the sociology of health and medicine more broadly.

THEORY

Social Justice and Human Enhancement in Today's Bionic Society

by Antonio Maturo *

The use of substances that improve cognitive abilities is now more and more common in many countries. These treatments are not aimed at curing pathologies, but rather at enhancing normal human capabilities, i.e., people are using pharmaceutical products to alter their biological makeup. The following article investigates this phenomenon and questions the role of the State in relation to this practice. The article concludes with an explanation of why the State, unlike what some bioethicists have proposed, should not support the use of cognitive enhancers.

Key-words: bionic society, egalitarianism, pharmaceutalization, social justice, medicalization, human enhancement.

1. Biology as the Language of Daily Life

In one of his films, Woody Allen hilariously remarked “God is dead, Marx is dead and I don’t feel so well myself”. With this quip, the director was able to synthesized years of philosophical reflections about the explicative limits of thought systems founded on religion or critical thought. In addition, we can read a reference to the crisis of the subject in this line (“and I don’t feel so well myself”), and, as an extension, to rational actor theories and individual’s ability to make choices upon evaluation of the immediate consequences. Francois

* Antonio Maturo, Associate Professor of Sociology of Health at the University of Bologna and Regular Visiting Professor at Brown University, antonio.maturo2@unibo.it

Lyotard, in a more serious context, had predicted the collapse of the grand narratives (illuminism, idealism, marxism) for explaining society (Lyotard, 1984). Postmodern society, explained Lyotard, can only be understood through partial, contingent and contextually interlaced narrations.

In the eighties, Luhmann added the theme of complexity to these characteristics. Society is made up of subsystems which interrelate with their environments through their own particular code. Society is not guided by a central system, every subsystem (the economy, rights, power...) is characterized by its own code, which is also its communicative filter with the environment (Luhmann, 1993).

In recent years, society has grown more complicated. For the most part due to, or thanks to, new technologies, first and foremost the internet, and globalization. Interdependence, conflict and the predominance of risk have weakened the possibility of “governing it” and even of giving it a common description. With the weakening of religious doctrine, the abandonment of marxist critical theories and the predominance of weak thought a frame and model of thought of biomedical derivation is reemerging as tool for analyzing the present, situating single choices and finding concrete points of reference.

Medicine seems to be thriving these days.

As a matter of fact, not a day passes without there being some mention in the news of the latest discoveries in neuroscience. The fundamental assumption is that since thoughts and emotions are the result of neuronal processes, if we are able to act on these mechanisms we will be able to modify our capacity to think and feel. And so, for example, by taking a random selection of news items that have appeared in the principle Italian dailies in the last years, we discover that a neuroscientist, Colin Camerer, professor of “behavioral finance” at Caltech in Pasadena, estimates that, thanks to his magnetic resonance experiments on the brain activity, in ten years there will be a pill for improving our ability to make good investment decisions in the stock market¹. In the newspaper *La Stampa*, on 14 August 2010 we read news about a medicalization “classic”, ADHD (Attention Deficit Hyperactivity Disorder), this time however, in relation to married couples. According to Melissa Orlov, author of *The ADHD effect on marriage* (translated Chinese in even), many separations are caused

1. Maria Teresa Cometto, E se inventassimo la pillola per stare bene? *Corriereconomia*, 13 June 2011, p. 21.

by the pathological distractions of one of the partners (typically the husband). Curing this attention deficit would lead to fewer divorces. We know about the heated debates surrounding the devastating effects of these pharmaceuticals on the treatment of ADHD (Conrad, 2007). On 22 October 2009, The daily *la Repubblica*² featured an article on sleep research. A group of scientists from the University of Pennsylvania were experimenting with a pill capable of “mim-ing” the effects of sleep by manipulating brain enzymes (Vecsey, 2009). Tali Sharot, in her aptly titled book *The Optimism Bias: A Tour of the Irrational Positive Brain* (2012), claims that optimism was favored during evolution because optimistic people live longer. The idea is that positive expectations, acting like a self-fulfilling prophecy, increase our probability of success.

The impression is that research like this is very complicated, but that the scientists, or perhaps the journalists that report the discoveries, tend to overly simplify and to be overly optimistic.

These scientific proposals share the assumption that it is possible to intervene on the biology of human beings in order to make us different. Thanks to various technologies we can become “better”. In some cases, like that of ADHD, the process involves a pharmaceutical treatment. In other instances, like in the case of the anti-sleep pill, we are talking about a pharmaceutical intervention on people who are potentially healthy (even if the research was originally intended to be therapeutic). In the case of the “investment drugs” we would be dealing with a typical cognitive enhancer – like the one described in the film *Limitless*. In the case of Sharot, however, we are dealing with something different: a biological explanation, genetic to be precise, of a psychological characteristic. A pharmaceutical that allows us to perceive the world in a rosier light would make us more capable and successful.

In these examples, I have passed over all those cases of geneticization that are routinely reported in the news and which see genes as the “agents” of human destiny (Cipolla, 2010). For example, the alcoholism gene, the lung tumor gene or, as has been written about, the political leaning gene. One line of research which is very fertile today, and the reason for this is self-evident, investigates how to modify our genetic code in order to produce adequate immune

2. Elena Dusi, Sonno (2009). Con una pillola puoi farne a meno. *la Repubblica*, 22 October 2009, p. 22.

responses: for example an immune system that is resistant to the HIV virus or prevents carcinogenic actions (Balisteri, 2011, p. 24).

In different ways, all of these discoveries and avenues of research disregard the social element of life. In other words, although a variety of examples have been presented, there is a tendency to turn to technology to find solutions to problems which for the most part have social causes. As I noted earlier, these situations are constructed within the framework of a biomedical language. We are dealing with the conceptual medicalization of society (Conrad, 2009) in which we view ourselves as individuals are determined by our biological makeup. Somatic individuals, or «beings whose individuality is, in part at least, grounded within our fleshly, corporeal existence, and who experience, articulate, judge, and act upon ourselves in part in the language of biomedicine» (Rose, 2008, p. 26). This type of biologicalization of every behavior, action and emotion leads to reductionism: «the social brings us back to the cerebral, the cultural to the natural, the mind to the body» (Marrone, 2011, p. 40). The centrality that we give to our own health these days – the healthization of life – is indicative of this situation. The right to pursue happiness guaranteed by the Constitution of the United States has been overtaken by the duty to stay in good shape: «The promotion and celebration of health as the paramount value of Western society has encouraged people to interpret a variety of human activities through the vocabulary of medicine» (Furedi, 2006, p. 14). For example, in advertisements attention has shifted from the quality of food to its caloric content and its ability to lower cholesterol (Lawrence and Germov, 2008). Of course, this colonization of the greater part of human actions by the medical sphere has a long history. In 1948, the World Health Organization defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Obviously, a lots has been written about this definition. Scholars have generally focused on the “ambitious” nature of this definition or, on a positive note, on its extension of the concept of health to include the social elements (Maturo, 2009a). Nevertheless, one can see that the definition derives from a “panhealth” in so much as there are very few aspects of life which do not fall under the domain of health. Moreover, if medicine is the institution responsible for intervening in issues of health and defining what is normal and what is pathological (Freidson, 1970) then medicine is legitimate in extending its jurisdiction (Abbott, 1988) well beyond the sickbed.

2. Bionic Society

Today we live in a society which is becoming more and more “bionic” everyday. Technological interventions aimed at transforming human biology are becoming increasingly common. Whereas for thousands of years humans tried to control their external environment through technology, today technology is increasingly used to internally modify our own biology (Garreau, 2004).

This intervention on the human biology carries with it a tendency to “think” in biological terminology. Medicalization, that is the transformation in medical problems of human conditions which up to that point did not present pathological traits, is growing (Conrad, 2009). Not only experts are promoting this vision. Even the so-called everyday life, so dear to Habermas (1986), “thinks and speaks” in systemic terms which derive from the biomedical sphere. In some cases, lay knowledge promotes medicalization, as Barker (2008, p. 21) demonstrates in her analysis of an electronic support group for sufferers of the contested illness fibromyalgia syndrome: «ESGs can play a crucial role in defining diffuse human suffering in medical terms and engendering patient-consumer demand for medical recognition that physicians are often reluctant to provide». Recently, Cardano and Lepori (2012) have recounted and analyzed the history of the fight for the medical recognition of voice-hearers. Conrad (2009) had already noted that the driving forces of medicalization lie outside the world of doctors and even consumers.

Not only do we intervene to treat that which is discovered or defined as a pathology, but to enhance normal human capabilities. Nevertheless, it is paradoxical that *we use medical devises, not to become more artificial, but rather to regain our naturalness*. We take psychopharmaceuticals which by definition alter our sensations and perceptions, in order to rediscover ourselves. As Rose writes in his analysis of the advertising for one antidepressant: «the drug thus does not promise to create a false self, on the contrary, it is through the drug that the self is restored to itself. If there is one theme or promise that runs through all these promotional materials it is this: with this drug, I can get my real self back, I can feel like myself, I can feel like me again» (Rose, 2008, p. 333). So here, through the use of artificial technologies, we become more natural. We use psychopharmaceuticals to restore a presumed normalcy. This is common not only in the context of medical treatments but also in relation to narcotics use. In Italy, the consumption of cocaine and marijuana is more