Magic Bullet in the Head? Psychiatric Revolutions and Their Aftermath

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Abstract: This chapter examines the emergence and rise of a rhetoric of revolutionary change in western Psychiatry from the post-war period to the 2000s. It traces the roots of this rhetoric in the transformations of psychiatry and society in the immediate post-war period and examines the development of competing vision of revolutions in diverse segments of psychiatry in subsequent years. The chapter also offers a survey of the historiography of biological treatments and deinstitutionalization in the second half of twentieth century.

Keywords: History of psychiatry, antipsychotic drugs, therapeutic revolutions, social change

Chapter 3

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> About eight years ago, a new type of drug [i.e. neuroleptics] was joined to the clinician's therapeutic armamentarium, and within a short time this resulted in three major consequences:
> 1. Pharmacology was faced with the task of determining the mechanisms which were responsible for the new and surprising therapeutic effects of these drugs.
> 2. Psychiatry found itself in possession of a new pharmacological approach which resulted in a veritable revolution in the treatment of psychotic conditions.
> 3. Business was presented with a boom in "tranquilizers.""[1]

> "If a person who wanted to reform society through revolutionary social change were to be stricken with schizophrenia or depression, he would be much more likely to overthrow the government if he took chlorpromazine or an antidepressant than if he did not.[2]

These two quotes illustrate two widely divergent yet inseparable narratives of revolution and change in the field of psychotropic drug development in the post-war era. The first one, written in 1960 by the German-born Canadian psychiatrist and pioneering psychopharmacologist Heinz Lehmann, is an early and perceptive reflection on the contribution of neuroleptics[3] to the

Benoit Majerus was an initial collaborator on this project, and I thank him for generously letting me work with his ideas. I also want to thank the editor both for inviting this chapter to the volume and for innumerous comments and suggestions that have quite substantially helped improving it. Finally I thank Isabelle Baszanger, Jean-Paul Gaudillière and Marie Reinholdt for their comments on an earlier version of the chapter, as well as Marina Urquidi, who corrected my English.

[1] H. E. Lehmann, "Psychoactive drugs and their influence on the dynamics of working capacity," *Journal of Occupational and Environmental Medicine* 2 (1960): 523.
[2] Marvin E. Lickey and Barbara Gordon, *Drugs for mental illness : a revolution in psychiatry*, A Series of books in psychology (New York: W.H. Freeman, 1983), 297.
[3] Throughout this chapter, the term "neuroleptics" will be used generically to refer to the class of

dramatic transformations occurring at the time in the laboratory, the clinic, and industry, which would give birth to what is now often termed the biomedical complex. The second quote comes from a popular account written in 1983 by Marvin Lickey and Barbara Gordon, two promoters of the neuroleptic revolution, at a time of crisis in confidence in psychotropic drugs. It engages critically the at the time widely held belief that madness is political and that mad people should not be considered as sick people but rather as the forerunners of revolutions yet to come. The revolution, in this case, referred to a wider social movement similar to that that had affected western societies after 1968. In this regard, Lickey and Gordon's message was clear: the creation of psychotropic drugs was not only a revolutionary breakthrough for psychiatry; it also had potentially a much wider significance.[4]

This chapter addresses the evolving, divergent, and at times competing narratives of revolution and counter-revolution in the field of North American and European psychopharmacology and psychiatry at large from the 1950s to the 1980s[5]. Focusing on discursive constructions of change and progress, it locates revolutionary claims about psychotropic drugs within the dynamics of pharmacological innovation and industrial marketing, as well as within larger visions of a transforming mental health and changing societies.

Most mental health professionals acknowledged the revolutionary nature of neuroleptics almost immediately after their introduction in psychiatry in the early 1950s. But stabilizing a

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drugs that was created with the description of the psychiatric effects of chlorpromazine in 1952. As will be reviewed below, other terms were in circulation in some countries—most notably "major tranquilizers" in the USA—and the term "antipsychotics" gradually replaced the term "neuroleptics" from the 1970s on in most, if not all countries. For the period covered in this chapter, "neuroleptics" was the most commonly used label, even more so in scientific publications. It remains the term used today in the International Pharmacopoeia.

[4] Another version of the convergence of psychiatric treatment and a wider social movement is reflected in the Robespierre add in the introduction of this volume.

[5] For an account of the emergence of psychopharmacology as a "counterrevolution" see: Andrew Scull, "A psychiatric revolution," *Lancet* 375, no. 9722 (2010).

consensual interpretation of their contribution to the field soon proved to be much harder. If standardizing psychiatric practices and knowledge seemed to many a solution to this challenge, it also created immense problems in an increasingly differentiated field. These challenges were magnified by the expectations surrounding a discipline that claimed for itself a role in guiding societies through processes of modernization. All this was reflected in the diverse visions of the neuroleptic revolution that became popular from the beginning of the 1960s. By the 1970s, as fears of widespread social control through the means of psychiatric technologies became increasingly expressed, neuroleptics had become the target of divisive conflicts regarding both their effects on patients, and their wider uses in the management of vulnerable populations. In the end, the turbulent trajectory of neuroleptics reflected, in many ways, the deep involvement of psychiatry with contemporary social movements.

A key parameter in this analysis is the increasing differentiation of the world of mental health professionals in the post-war era. The emergence of a series of new professions including psychologists, psychoanalysts, psychotherapists, occupational therapists, social workers, and psychiatric nurses, turned mental health into a much disputed jurisdiction. Even within the discipline of psychiatry, different subfields began to claim strikingly divergent visions of what their profession was about, how it should be practiced, and how it should evolve. Patient and consumer movements, the emergence of a full contingent of civil rights activists with an interest in psychiatry, and the involvement of feminists and sexual minorities in psychiatric matters soon turned mental health into an overcrowded battlefield. Fomenting revolutions, in this context, seemed a reasonable strategy to gain both an audience and a clientele.

Turning chlorpromazine into a revolution

In recent years, historians of psychiatry have begun to question the scope of the neuroleptic revolution. The psychiatrist and historian David Healy has produced a comprehensive account of the development of psychopharmacology as a field from the early 1950s to the 1990s.[6] While he does not contest the revolutionary status of neuroleptics and other psychotropic drugs, he shows that many of the changes they brought about in psychiatry relied on commercial interests and heavy marketing rather than science or an interest for the well-being of psychiatric populations. Taking an even more critical stance, the psychiatrist Joanna Moncrieff argues that the pharmaceutical industry and the psychiatric profession have over-hyped the revolutionary basis of psychopharmacological innovation and suggests that understanding their contribution in more modest terms should lead to more democratic treatment practices.[7]

Other scholars have focused less on the shortcomings of earlier accounts of the neuroleptic revolution and more on the continuities in psychiatric therapeutic practices throughout the twentieth century. An important stream of research thus advocates a longer history of drug use in psychiatry. Sedatives such as chloral hydrates, bromides, and barbiturates were at the origin of a first series of psychopharmacological hypes during the last third of the nineteenth century and remained in widespread use right towards the end of the twentieth century.[8] As the historian Nicolas Rasmussen has demonstrated, amphetamines were marketed as

[6] David Healy, *The antidepressant era* (Cambridge, Mass.: Harvard University Press, 1997); David Healy, *The Creation of Psychopharmacology* (Cambridge, MA: Harvard University Press, 2002); David Healy, *Let them eat Prozac : the unhealthy relationship between the pharmaceutical industry and depression*, Medicine, culture, and history (New York: New York University Press, 2004).
[7] Joanna Moncrieff, *The bitterest pills : the troubling story of antipsychotic drugs* (Palgrave Macmillan, 2013); Joanna Moncrieff, *The myth of the chemical cure : a critique of psychiatric drug treatment* (Basingstoke ; New York: Palgrave Macmillan, 2008).
[8] Benoît Majerus, *Parmi les fous. Une histoire sociale de la psychiatrie au XXe siècle* (Rennes:

a specific treatment of depression well before the advent of tricyclic antidepressants.[9] Moreover, several historical studies have shown that older therapies were often complemented rather than replaced by new drugs. Chemotherapy was not easily implemented in many institutions plagued by overcrowding, shortage of staff, and limited funding. Benoît Majerus's thorough examination of patient records at the *Institut de Psychiatrie* in Brussels shows that neuroleptics were not homogeneously disseminated in Belgium and that various shock techniques continued to be used well into the 1950s and 1960s.[10] In his magisterial history of psychosurgery, Jack Pressman argues that the reason shock therapy was abandoned was not because it was less effective and regarded as ethically more questionable than drugs, but rather because it no longer compared well to them in the new understanding of therapy that had emerged over time.[11]

However compelling these arguments, it remains important to take into account the widespread sentiment, already expressed within months after the initial description of the psychiatric effects of chlorpromazine, that this drug would be of tremendous importance for psychiatry. The processes that led to the discovery of chlorpromazine as a psychiatric drug are well known.[12] A derivative of the chemical compound phenothiazine, chlorpromazine had been

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Presses Universitaires de Rennes, 2013); Stephen Snelders, Charles Kaplan, and Toine Pieters, "On cannabis, chloral hydrate, and career cycles of psychotropic drugs in medicine," *Bulletin of the History of Medicine* 80 (2006).

[9] Nicolas Rasmussen, *On speed : the many lives of amphetamine* (New York: New York University Press, 2008).

[10] Majerus, *Parmi les fous*.

[11] Jack D. Pressman, *Last resort. Psychosurgery and the limits of medicine* (Cambridge: Cambridge University Press, 1998). Also see Joel Braslow, *Mental ills and bodily cure : Psychiatric Treatment in the First Half of the Twentieth Century* (Berkeley (CA): University of California Press, 1997).

[12] The best account on the development of chlorpromazine by the French pharmaceutical company Rhône-Poulenc and its distribution from the early 1950s on remains Judith P. Swazey, *Chlorpromazine in psychiatry : a study of therapeutic innovation* (Cambridge, Mass. ; London: MIT press, 1974). The value of Swazey's work lay notably in the fact that she had had access to industrial archives that are now lost. In recent years only Viviane Quirke was able to access new

synthesized in 1950 by the French drug company Rhône-Poulenc and introduced into psychiatry by the French military surgeon Henri Laborit. It was probably the Parisian professor of psychiatry Jean Delay, one of the most respected international authorities in the field, who with his assistant Pierre Deniker contributed most to launching the career of chlorpromazine in psychiatry. In the second half of 1952, Delay and Deniker began to report systematically on the effects of the drug on psychiatric patients in a series of publications in French journals. The reason why chlorpromazine was remarkable was that contrary to earlier sedatives used in psychiatric hospitals it had an effect on delusions, hallucination and mental confusion without inducing sleep. Moreover its action on an impressively wide array of symptoms made it a choice treatment for a variety of psychiatric conditions, from schizophrenia to chronic delusions to mania.

Within months, chlorpromazine was made available to French neuropsychiatrists and trials were organized in other countries, including the US in 1953, while clinicians and industry scientists began systematic testing of other compounds with similar chemical properties in the hope of enlarging the armamentarium. In 1955, the first major conference on neuroleptics was organized by Delay and Deniker in Paris, gathering more than 400 participants from 22 countries

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material from Rhône-Poulenc. See Viviane Quirke, *Collaboration in the pharmaceutical industry. Changing relationships in Britain and France, 1935-1965*, Routledge Studies in the History of Science, Technology and Medicine (New York, London: Routledge, 2008), 197-204. David Healy's interviews with psychopharmacologists are also invaluable sources of data on the various groups that have contributed to shaping psychopharmacology over years: David Healy, ed. *The psychopharmacologists*, 3 vols. (London: Arnold, 1996-2000). The introduction and standardization of chlorpromazine in markets other than France and the United States was the focus of scholars gathered in the European network DRUGS. See Toine Pieters and Stephen Snelders, "Special Section: Standardizing Psychotropic Drugs and Drug Practices in the Twentieth Century," *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 42, no. 4 (2011). For a history of phenothiazines before the psychiatric revolution, see: Séverine Massat-Bourrat, "Des phénothiazines à la chlorpromazine. Les destinées multiples d'un colorant sans couleur" (Thèse de doctorat en Sciences, Technologies et Sociétés, Université Louis Pasteur (Strasbourg), 2004).

and demonstrating the worldwide enthusiasm surrounding the discovery. For better or for worse, by the end of the decade, the narrative of neuroleptic revolution was well on the road.

Before proceeding further with this story, let us reflect on the constellation of governmental, industrial, and clinical interests that enabled the spread of neuroleptics and their revolutionary status. Pharmaceutical companies clearly played a central role in shaping both psychiatrists' and the general public's perceptions of the neuroleptic revolution from the early days of the commercialization of chlorpromazine. Available evidence suggests, however, that this shaping occurred in diverse ways in different countries. The marketing of chlorpromazine first targeted hospital psychiatry.[13] Since psychiatric hospitals in most countries were funded by the state, this meant that marketers needed to convince both the physicians who prescribed the drug in institutions and the hospital administrators who paid for it. The strategy chosen in various countries thus reflected the balance of power between the two groups and also rested on the relationship between them and the pharmaceutical company. In the US, chlorpromazine was marketed by Smith, Kline and French (SK&F) as a "major tranquilizer" for treating agitation in institutionalized patients. Sales representatives set out to convince all state governments that they ought to increase funding for therapy in psychiatric hospitals; they also worked with clinicians to improve their work conditions. Historian Judith Swazey quotes former officials of the company describing these efforts as being "not lobbying per se" but rather "a true educative effort," but this account probably underplays other more commercial strategies used by SK&F, including

[13] Why companies focused on mental hospitals is not that clear. The argument most often found in the literature that office-based psychiatry was either non-existent or not receptive to drugs for ideological reasons does not seem to be particularly compelling. Chlorpromazine was also initially marketed for a series of non-psychiatric purposes, including nausea, vomiting as well as anesthesia. While these non-psychiatric uses—and others that emerged later on including in palliative care—were by no means negligible, they were clearly not a central market for companies. On these issues see: Swazey, *Chlorpromazine in psychiatry*.

communications in medical journals and mainstream magazines.[14] By all accounts these efforts were extensive.

On the western side of the European continent, Rhône-Poulenc and its international branch, Specia, do not seem to have expended the same amount of effort. In France, Rhône-Poulenc did not organize trials with clinicians. It distributed free samples to psychiatrists in the hope that they would adopt the drug. Then it distributed doses on demand to hospitals.[15] The sales division of the company also produced a leaflet, distributed by sales representatives, describing the wide spectrum of effects of the drug and its interest for several medical specialties. Advertising presence in medical journals was modest, at least during the 1950s. Perhaps the reason that Rhône-Poulenc did not sustain greater promotional efforts in France relates to the small, homogeneous, and centralized milieu of hospital psychiatrists. Rhône-Poulenc also worked closely with state laboratories and clinicians and might have sought to preserve its standing as a scientific enterprise. Specia seems to have had a similar strategy in the Netherlands and Belgium. In both countries, however, as noted by Toine Pieters and Benoît Majerus, the introduction of neuroleptics was delayed in several important institutions and discrepancies in usages of the drug developed over time.[16] Specia did not try to homogenize local practices but rather embraced those differences by providing personalized dosages. As a team of German medical historians led by Volker Hess has shown, marketing played out differently in the centralized system of production and distribution of pharmaceuticals in the German

[14] Ibid., 203.
[15] Ibid., p 138-141 and Quirke, *Collaboration in the pharmaceutical industry*., p. 203.
[16] Toine Pieters and Benoît Majerus, "The introduction of chlorpromazine in Belgium and the Netherlands (1951-1968); tango between old and new treatment features," *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 42, no. 4 (2011).

Democratic Republic.[17] These examples suggest how marketing strategies may have, from the outset, engendered quite different local understandings of the chlorpromazine revolution.

However, what soon proved to be common to these various local stories was a dramatic shift in the understanding of how neuroleptics worked during the first decade after their discovery.[18] In the early 1950s, most pioneering psychopharmacologists shared a holistic vision of neuroleptics. Building on a style of reasoning that had been developed in the interwar period and put to work for shock treatment, they thought that chlorpromazine and other drugs with similar properties worked by modifying the regulatory system of the organism overall. The term "*neuroleptique*" was chosen in 1955, after other tentative labels, by Jean Delay and Pierre Deniker to designate chlorpromazine to reference the ways in which the drug was supposed to "grasp" the nervous system.[19]

The psychological effects of the drug, which were characterized without reference to any specific condition, derived not only from the wider impact of these biological phenomena, but also from the very act of administering the "neuroleptic cure." So did a series of sociological effects. What was revolutionary in neuroleptics was not only their stunning effects on patients, but also the ways in which they helped transform the perception of the psychiatric hospital as a

[17] Volker Hess, "Psychochemicals crossing the wall. Die Einführung der Psychopharmaka in der DDR aus der Perspektive der neueren Arzneimittelgeschichte," *Medizinhistorisches Journal* 42 (2007). Also see: Ulrike Klöppel and Viola Balz, "Psychotropic drugs in socialism? Drug regulation in German Democratic Republic in the 1960s," *Berichte zur Wissenschaftsgeschichte* 33, no. 4 (2010).

[18] A straightforward, albeit partial, account of this shift can be found in: Moncrieff, *The bitterest pills*.

[19] Pierre Deniker, "Qui a inventé les neuroleptiques? ," *Confrontations psychiatriques*, no. 13 (1975). Delay and Deniker were prominent partisans of the diencephalic hypothesis. See Emilie Bovet, "Biographie du diencéphale. Revisiter l'histoire de la psychiatrie à travers le parcours d'une zone cérébrale" (Thèse de doctorat ès sciences de la vie, Université de Lausanne, 2012). On Delay's holism, see: George Weisz, "A Moment of synthesis: Medical holism in France between the Wars," in *Greater than the parts : holism in biomedicine, 1920-1950*, ed. Christopher Lawrence and George Weisz (New York: Oxford University Press, 1998).

truly therapeutic place. Chlorpromazine gave mental health professionals a new role and generated new kinds of relationships both among professionals and between professionals and patients. A key role in shaping this understanding was played by sociologists and social scientists who had devoted considerable efforts to analyzing hospitals as small communities during the 1950s. Most notably, this account held little room for the idea that some neurological effects of the drugs might be in fact "side effects." Indeed, most early promoters of neuroleptic chemotherapy, including Delay and Deniker, seemed to believe that the neurological effects of the compound were necessary for the drug to exert its psychological effects, as was a controlled milieu.

By the mid-1960s, holistic approaches to neuroleptics had receded and to a large extent had given way to more specific materialist accounts of how they worked. The hypothesis that neuroleptics acted at a molecular level on a brain mechanism underlying a specific disorder, namely schizophrenia, began to gain ground and eventually replaced earlier concepts. A turning point in this process was the multi-centered study conducted by the National Institute of Mental Health in the early 1960s that used, for the first time, a battery of standardized diagnostic scales to assess the effectiveness of three neuroleptics.[20] These drugs appeared to have such a dramatic impact on core schizophrenic symptoms that investigators concluded, "[a]lmost all symptoms and manifestation characteristic of schizophrenic psychoses improved with drug therapy, suggesting that the phenothiazines should be regarded as 'antischizophrenic' in the broad sense."[21] In the following years, the idea that neuroleptics were a specific medicine for schizophrenia was strengthened by the hypothesis that they acted on the brain by modifying the

[20] Swazey, *Chlorpromazine in psychiatry*.
[21] The National Institute of Mental Health Psychopharmacology Service Center Collaborative Study Group, "Phenothiazine treatment in acute schizophrenia," *Archives of General Psychiatry* 10, no. 3 (1964): 257.

balance of a specific neurotransmitter, namely dopamine, and that the onset of schizophrenia might be related to this phenomenon.[22] For the next two decades, the "dopamine hypothesis" would be the leading neuroanatomical model for explaining the cause of schizophrenia. From the statistical perspective of psychiatric epidemiology, accelerated discharge of hospitalized patients, as part of the process of "deinstitutionalization," seemed to make the efficacy of these medications self-evident. Eventually, the transmutation of neuroleptics was made complete by a change in nomenclature. Beginning in the 1970s, the term "antipsychotics" began to be used as a substitute for "neuroleptics" in the US, and by the 1990s, it had largely replaced the original characterization in most countries.

Early appraisals of the revolutionary nature of neuroleptics focused to a large extent on the change they generated within hospitals. By the 1960s, however, narratives of the neuroleptic revolution underscored the wider change in perspective brought about within the psychiatric profession at large. Neuroleptics and other psychotropic drugs had succeeded in bringing about a completely new way of conceptualizing psychiatry as both a practice and a science. A comment published in 1964 in the *American Journal of Psychiatry* reflecting on "the current psychiatric revolution" commented in lyrical ways on the changing status of the discipline and its novel association to medicine.[23] Similar statements were made in France and in Germany. By the end of the 1960s, such perspectives had coalesced into the notion that a new medical model of

[22] B. K. Madras, "History of the discovery of the antipsychotic dopamine D2 receptor: a basis for the dopamine hypothesis of schizophrenia," *Journal of the History of the Neurosciences* 22, no. 1 (2013); Alan A. Baumeister and Jennifer L. Francis, "Historical development of the dopamine hypothesis of schizophrenia," *Journal of the History of the Neurosciences* 11, no. 3 (2002).
[23] "The current psychiatric revolution," *American Journal of Psychiatry* 121, no. 5 (1964).

psychiatry was coming of age.[24] The neuroleptic revolution was a revolution for psychiatry as both a practice and a discipline—a psychiatric revolution indeed.

Revolutionary standards

The recognition that chlorpromazine had brought about a revolution in psychiatry still left the meanings of this revolution as an open question.[25] For example, there was nothing self-evident in how the emerging standard accounts insisted on both the specific action of the drug on schizophrenia and its role in the deinstitutionalization process. Not only were both phenomena disputable, as generations of critics have claimed. One may even argue that they only made sense within a framework for evaluating psychiatric practices that was largely created at the same time as neuroleptics themselves. Beginning in the late 1950s, what neuroleptics were good for and what they meant began to be understood within a series of new infrastructures for organizing and evaluating psychiatric practices. These infrastructures included classifications, psychopathological and psychometric scales, databases, and trials and involved all aspects of psychiatric work, from diagnosis to prescription to policy making. Their creation, in turn, was the result of a complex dynamic of innovation and standardization processes occurring in the clinic and in the industry, as well as in the administration of welfare and social services. In the end, the very idea of a neuroleptic revolution would be inseparable from a wider transformation in psychiatry through the standardization of knowledge and practice.

[24] e.g. S. S. Kety, "From rationalization to reason," *American Journal of Psychiatry* 131, no. 9 (1974).
[25] This question was formulated by several prominent figures. See for instance the comments made in 1954 by an official of SK&F on the significance of chlorpromazine: Swazey, *Chlorpromazine in psychiatry*, 190. Or for France those by the prominent psychiatrist Henri Ey: Henri Ey, "Neuroleptiques et services psychiatriques hospitaliers," *Confrontations psychiatriques*, no. 13 (1975).

Critical voices have pointed to the role of the pharmaceutical industry in shaping these transformative processes, suggesting that “Big Pharma” was allowed to set the very standards it then used to evaluate its own success. It is true that standardization clearly developed into a key battleground for the interpretation of the neuroleptic revolution. Psychopharmacology as both a scientific field and an industrial venture played an important role in the setting of a wide array of influential psychiatric standards, which in turn also shaped in decisive ways how psychopharmaceuticals should be understood. Nonetheless, accounting for the phenomenon in all its dimensions requires a broader perspective. Beyond psychopharmacology, the impulse for standardization in psychiatry came from a complex interaction between scientific and professional interests, the industry and marketing practices, and social movements and politics. These various forces played out differently in different contexts, resulting in distinct local configurations. While the standardization of psychiatric practices was certainly a universal phenomenon, locally it affected the various dimensions of psychiatric work in assorted ways, leading to the paradox of standardization shaping diverse local conceptions of the neuroleptic revolution.

The field of diagnosis illustrated the give and take of these processes. Indeed, beginning in the early 1960s, the accumulation of standards for psychiatric diagnosis could be considered a revolution in itself. At least this is how the most iconic of these, namely the third edition of the Diagnostic and Statistical Manual (DSMIII) of the American Psychiatric Association (APA), was hailed by both its promoters and its critics upon its publication in 1980.[26] However, the sensation

[26] E.g. R. L. Spitzer and J. C. Wakefield, "DSM-IV diagnostic criterion for clinical significance: does it help solve the false positives problem?," *Am J Psychiatry* 156, no. 12 (1999); W. M. Compton and S. B. Guze, "The neo-Kraepelinian revolution in psychiatric diagnosis," *Eur Arch Psychiatry Clin Neurosci* 245, no. 4-5 (1995); R. Mayes and A. V. Horwitz, "DSM-III and the revolution in the classification of mental illness," *Journal of the history of the behavioral*

over the DSMIII and its influence in American psychiatry and beyond has overshadowed the significance of other less discussed but widely influential instruments also developed in the 1960s and 70s.

German psychiatrists, for example had created their own standardized schedule for collecting psychiatric data. A Working Group on Methods and Documentation in Psychiatry (Arbeitsgemeinschaft für Methodik und Dokumentation in der Psychiatrie) released the so called AMP system in the early 1960s, which was implemented in most German clinics by the end of the decade.[27] Also in the 1960s, the World Health Organization (WHO) devoted considerable efforts, with decisive input from British psychiatrists, to develop a classification schedule that could be used by psychiatrists all over the world within the framework of the International Classification of Disease.[28] In cooperation with psychiatrists from the US National Institute of Mental Health (NIMH), the WHO also created a series of new standards for the diagnosis of schizophrenia that would contribute to a profound reformulation of the definition of this disease. Many other influential standardized diagnostic scales were developed by individual or groups of clinicians during the same years, so much so that by the 1980s a plethora of instruments were circulating in the field, at the cost of some confusion when clinicians had to choose among different tools for assessing the same conditions.

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sciences 41, no. 3 (2005)..

[27] Viola Balz, *Zwischen Wirkung und Erfahrung – eine Geschichte der Psychopharmaka. Neuroleptika in der Bundesrepublik Deutschland. 1950-1980* (Bielefeld: Transcript Verlag, 2010). AMP was the acronym for *Arbeitsgemeinschaft für Methodik und Dokumentation in der Psychiatrie* (Working Group on Metholodolgy and Documentation in Psychiatry), after the name of the group that had created the system.

[28] The history of the chapter on mental disorders in the ICD remains understudied. For an introduction to the issues raised at the time of the first edition of this classification see: Robert E. Kendell, *The role of diagnosis in psychiatry* (Oxford ; Philadelphia: Blackwell Scientific Publications, 1975). Also see for a very brief historical overview: Michael Shepherd, "ICD, mental disorder and British nosologists. An assessment of the uniquely British contribution to psychiatric classification," *British Journal of Psychiatry* 165, no. 1 (1994).

Psychiatry as a whole did not immediately embrace diagnostic standardization. The initial resistance to DSMIII within the American mental health community has been well described. However few critiques really disagreed with the ultimate goal of achieving more reliable diagnostic practices.[29] Some national communities developed more idiosyncratic opposition to diagnostic standardization. For decades French psychiatry remained characterized by a form of defiance toward standardized instruments in clinical work, to the point that even psychiatrists who otherwise defended a medical and biological vision of their discipline were reluctant to use them.[30] Significantly, although they would later call for the development of standardized diagnostic instruments and play an important role in their introduction into French psychiatry, Delay and Deniker advocated a clinical assessment of neuroleptics in place of randomized clinical trials in their celebrated 1961 handbook of psychopharmacology, at a time when clinical trials were becoming a standard procedure in Anglo-Saxon countries.[31]

France was nonetheless a notable exception and, by the mid-1960s, diagnostic standards had become an essential ingredient in psychiatry in general and in the development of psychopharmacology in particular. The regulation of drug marketing and approval in most

[29] The critique of the DSMIII that proved to be the most influential probably came from psychology and bore on the very means by which psychiatrists sought to achieve reliability. See: Stuart A. Kirk and Herb Kutchins, *The selling of DSM : the rhetoric of science in psychiatry*, Social problems and social issues (New York: A. de Gruyter, 1992)..

[30] See Nicolas Henckes, "Mistrust of numbers: The difficult development of psychiatric epidemiology in France, 1940-1980," *International Journal of Epidemiology* 43, no. suppl 1 (2014).

[31] Jean Delay and Pierre Deniker, *Méthodes chimiothérapiques en psychiatrie* (Paris: Masson, 1961).. The first multicentric randomized trial was organized in France in the 1970s. See: Henri Loo and Edouard Zarifian, "Limite d'efficacité des chimiothérapies psychotropes," in *Comptes rendus du congrès de psychiatrie et de neurologie de langue française* (Paris: Masson, 1977). According to a recent survey by the WHO and the World Psychiatric Association (WPA), French psychiatrists today still lag far behind their colleagues in other countries in the use of classifications schemes. See: G. M. Reed et al., "The WPA-WHO Global Survey of Psychiatrists' Attitudes Towards Mental Disorders Classification," *World Psychiatry* 10, no. 2 (2011).

countries during the 1960s and 1970s made randomization and the use of standardized diagnostic methods a basic requirement of sound trial methodology.[32] Standardization of diagnostic practices also ranked high on the agenda of psychopharmacologists.[33] The credibility of psychopharmacological research required that clinicians working in different settings give similar diagnoses for similar clinical presentations. At a time when almost every clinician might have had his or her own diagnostic idiosyncrasies, achieving reliable diagnoses between raters (measures of "inter-rater reliability" would later be quantified as the "kappa score") was no small feat.

Other branches of psychiatric research shared similar concerns with psychopharmacologists regarding diagnostic reliability. In the US, psychometrics developed into a major research program at the NIMH immediately following its establishment in 1948.[34] Standardizing diagnosis soon became a priority for the American psychiatric practice as well, as several influential and widely publicized studies showed high levels of inconsistencies in diagnosis practices by the 1970s.[35] Standardizing diagnosis had become both a solution to the

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[32] Dominique A. Tobbell, *Pills, power, and policy : the struggle for drug reform in Cold War America and its consequences*, California/Milbank books on health and the public (Berkeley; New York: University of California Press ; Millbank Memorial Fund, 2012); Jean-Paul Gaudillière and Volker Hess, *Ways of regulating drugs in the 19th and 20th centuries*, Science, technology and medicine in modern history (Basingstoke: Palgrave Macmillan, 2013).
[33] T. A. Ban, "A history of the Collegium Internationale Neuro-Psychopharmacologicum (1957-2004)," *Prog Neuropsychopharmacol Biol Psychiatry* 30, no. 4 (2006). See also the comments by Delay at the Fourth World Congress of Psychiatry: Jean Delay, "Introduction," in *Proceedings. Fourth World Congress of Psychiatry. Madrid 5-11 September 1966*, ed. J. J. Lopez-Ibor, et al. (Amsterdam: Excerpta Medical Foundation, 1967)..
[34] Ingrid G. Farreras, Caroline Hannaway, and Victoria Angela Harden, *Mind, brain, body, and behavior : foundations of neuroscience and behavioral research at the National Institutes of Health*, Biomedical and health research (Amsterdam ; Washington, D.C.: IOS, 2004)..
[35] Hannah S. Decker, *The making of DSM-III: a diagnostic manual's conquest of American psychiatry* (New York: Oxford University Press, 2013); Steeves Demazeux, *Qu'est-ce que le DSM ? : genèse et transformations de la bible américaine de la psychiatrie* (Paris: Ithaque, 2013)..

fragmentation of the profession and an answer to the widespread critique that psychiatry lacked a scientific foundation.[36] These factors gave American psychiatry a definitive position of leadership in the development of standardized diagnostic methods, followed closely by British and German speaking mental health communities.

Accounting for the exact role of diagnostic standards in changing the understanding of neuroleptics is not an easy endeavor, however. A widespread critique of the pharmaceutical industry has charged that diagnostic standards have been a major vehicle for its influence over psychiatry. Classifications and diagnostic scales would have been tailored to demonstrate the superior effectiveness of drugs on given mental disorders.[37] There is no doubt that the pharmaceutical industry helped set and disseminate a number of standards. In Germany, the AMP system began as a collaborative project between German university psychiatrists and the Swiss pharmaceutical industry. In the US, however, the influence of the pharmaceutical industry over experts participating in DSM committees is only—and perhaps can only be—a supposition. But these critiques do not account for the reason practitioners used these scales.

As demonstrated by the history of the Hamilton scale for depression, the fact that a specific scale developed into a standard for both the industry and the profession relied more often than not on a Darwinian-like process of selection in which experts chose from multiple instruments the one that best matched their needs.[38] On a wider scale, the fact that sets of standards had become essential both to the assessment of the effectiveness of given drugs and to

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[36] See the autobiographic comments of Melvin Sabshin, the Medical Director of the American Psychiatric Association at the time of the launching of the DSMIII project: Melvin Sabshin, *Changing American psychiatry : a personal perspective*, 1st ed. (Washington, DC: American Psychiatric Pub., 2008).
[37] Healy, *The antidepressant era*; Moncrieff, *The bitterest pills*..
[38] M. Worboys, "The Hamilton Rating Scale for Depression: The making of a "gold standard" and the unmaking of a chronic illness, 1960-1980," *Chronic Illness* 9, no. 3 (2013).

clinical practices relied on a series of transformations occurring simultaneously within the pharmaceutical industry and psychiatry, eventually aligning research, marketing, and clinical practices. Research by the historians Lucie Gerber and Jean-Paul Gaudillière on the development of antidepressants by the Swiss firm Ciba Geigy shows how that company's chain of production and marketing was reorganized at the end of the 1960s with the systematic introduction of animal models and standardized psychopathological testing not only to screen molecules but also to organize markets.[39] The company's success in selling its products was also predicated on the emergence of a new group of prescribers in need of guidelines, namely general practitioners.

While there are still no sources-based studies of the history of neuroleptics in the 1970s and 1980s, it is clear that the story of this class of psychopharmaceuticals departed significantly from that of the antidepressants. Achieving diagnostic specificity in the field of schizophrenia proved to be a daunting challenge. Neuroleptics as antischizophrenics never achieved full acceptance, and psychiatrists continued to prescribe them for a variety of other conditions. A dimension of the problem came from the increasingly influential idea that the label schizophrenia might in fact refer to several clinical syndromes that probably did not share any pathophysiological correlates. From the late 1970s on, the selective effects of neuroleptics on certain clinical presentations helped strengthen this approach. For instance the concept that schizophrenia might be broken down into two syndromes, positive and negative, was shaped in crucial ways by the notion that positive schizophrenia was affected by neuroleptics while negative schizophrenia was not.[40] Nonetheless, the significance of neuroleptics for the diagnosis

[39] Lucie Gerber and Jean-Paul Gaudillière, "Marketing Masked Depression: Physicians, Pharmaceutical Firms, and the Redefinition of Mood Disorders in the 1960s-1970s," *Bulletin of the History of Medicine* (Forthcoming in 2015).
[40] Healy, *The antidepressant era*.

of psychosis has remained disputed until today. In many ways, neuroleptics have not found their standards.

The battle over diagnostic standardization may have been matched in intensity by the one over mental health policy. Mental health reform was certainly a central issue in most, if not all, countries from the early 1900s. During the first half of the century, this took different forms under divergent national psychiatric and political traditions, even though some approaches were circulating across national boundaries. A major development of the 1950s and 1960s was the emergence of deinstitutionalization as perhaps the universal standard for framing mental health policy. Once again, American psychiatry played a leading role in this development.[41] The idea that care for chronic patients could be organized outside mental hospitals and within communities was put forth by the influential 1961 Congressional report of the Joint Commission on Mental Illness and Health. [42] Two years later, the launching of a federal Community Mental Health Centers program seemed to offer a plausible alternative to psychiatric hospitalization in delivering care to long-term mental patients. In the next few years, what was then called "deinstitutionalization" turned into a genuine social movement. A significant segment of the psychiatric profession had enthusiastically endorsed community psychiatry, and activists set out to remove patients from institutions by juridical means borrowed from the struggle for civil rights. By the 1970s, following the example of the Reagan administration in California, deinstitutionalization had also become a way to control costs, if not to downsize social services. Deinstitutionalization expanded beyond the field of psychiatry to become a trend in other sectors,

[41] Gerald N. Grob, *From Asylum to Community. Mental Health Policy in Modern America.* (Princeton: Princeton University Press, 1991).
[42] The Joint Commission on Mental Illness and Health had been established in 1955 by the US Congress. Presided by Kenneth E. Appel, professor of Psychiatry at the University of Pennsylvania, it gathered representatives from some 20 organizations working in the mental health field.

such as criminal offense and disability. As Canadian, British, Italian and a few other European mental health policies followed the American trajectory - and in some cases, such as Italy, took an even more radical approach to closing mental hospitals -, and as WHO also supported the concept, deinstitutionalization seemed to develop into something of a new international standard.[43]

Not all countries adhered to this standard. Again, France was a notable exception to the trend of downsizing psychiatric hospitals.[44] What was seen by many as the French version of community psychiatry, namely the "*politique de secteur*" launched in 1960, did not envision a reduction in psychiatric hospitalization. Rather, it was intended to establish coordination between the numerous institutions working in the mental health field, to facilitate the transfer of patients from one to another when needed, and to avoid the abandonment of patients in understaffed remote hospitals. French mental health policy also included the largest plan to date for construction of psychiatric beds to relieve the overcrowding in psychiatric hospitals. A decrease in the population of psychiatric institutions after 1967 was barely anticipated by psychiatrists and health officials, and it was not until the late 1970s that the Ministry of Health set a reduced number of psychiatric beds as a goal for mental health policy—much to the dismay, at the time, of most psychiatrists, including those who advocated reform of their institutions. Even then,

[43] At the WHO, this was especially the case of the Regional Office for Europe, who devised in 1973 an ambitious programme for mental health services calling for the development of community psychiatry. See Hugh L. Freeman, Thomas Fryers, and John H. Henderson, *Mental health service in Europe : 10 years on*, Public health in Europe (Copenhague: WHO. Regional Office for Europe, 1985).

[44] Nicolas Henckes, "Le nouveau monde de la psychiatrie française. Les psychiatres, l'Etat et la réforme des hôpitaux psychiatriques de l'après-guerre aux années 1970" (Thèse de sociologie, Ecole des hautes études en sciences sociales, 2007).

debates over deinstitutionalization did not achieve the same level of popularity as in the United States and Great Britain.[45]

A key indicator in mental health policy debates in many countries was the number of beds in psychiatric hospitals. While there was a long tradition of discussing and comparing hospital statistics, using them as an instrument for policy making was a relatively new development in the postwar period. Although hospital statistics were more performative in a centralized country such as France, where five-year plans set quantified objectives for the construction and renovation of hospitals, they were also widely circulated at every level of the psychiatric systems of other countries. Internationally, standards for the optimal number of psychiatric beds had been set by WHO publications during the 1950s.[46] Bed numbers were a simple and telling measure of the conditions of the delivery of care to psychiatric patients that could be compared across widely divergent contexts. Yet they were a poor yardstick. They did not say much about the way these beds were distributed in the different regions. Nor did they say anything about the amount of care that was actually given to patients in the institutions. They were also silent about patients' conditions outside the institutions. For these reasons, interpretations of these figures tended to be hotly contested.

The contested role of neuroleptics as a cause of deinstitutionalization was central to these discussions. The idea that chlorpromazine was a cause in the reduction of psychiatric hospitalizations was put forth as early as 1957 by the US psychiatrist Henry Brill, who set out to demonstrate the process with statistical precision for the state of New York.[47] By the 1970s, this

[45] Other countries were even more distant from the US pattern, with Japan probably being the latest of the developed nations to downsize their psychiatric hospital system.
[46] WHO, *The Community Mental Hospital. Third Report of the Expert Committee on Mental Health*, Technical Report Series No. 73 (Geneva: World Health Organization, 1953)..
[47] H. Brill and R. E. Patton, "Analysis of 1955-1956 population fall in New York State mental

idea had become a central tenet of standard accounts of the neuroleptic revolution. It also had become a highly debated issue in policy circles, as well as a controversial topic for critics of biological psychiatry. Reservations about Brill's conclusions had been expressed starting with his early publications. The distinguished British psychiatrist Sir Aubrey Lewis discussed in 1958 the respective roles of drugs and psychosocial treatments in the decline of hospitalization in Britain. He argued "Certainly if we had to choose between abandoning the use of all the new psychotropic drugs and abandoning the Industrial Resettlement Units and other social facilities available to us, there would be no hesitation about the choice." Drugs were dispensable, not social psychiatry.[48] Such comments would grow stronger with time.[49] Increasing critiques of psychiatric hospitals as "total institutions" produced the impression that there was a genuine social movement behind the decline of mental institutions. Similarly, changing welfare policies and reimbursement schemes as well as rising neoliberal justifications for rescaling social policies developed into influential explanations of the phenomenon.[50] Finely grained analyses of hospital demography also tended to suggest that the downsizing of psychiatric hospitals owed much to the transfer of certain segments of their population, including older and mentally handicapped

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hospitals in first year of large-scale use of tranquilizing drugs," *American Journal of Psychiatry* 114, no. 6 (1957).

[48] Henry Brill et al., "The Impact of Psychotropic Drugs on the Structure, Function and uture of Psychiatric Services in Hospitals," in *Neuro-psychopharmacology. Proceedings of the first International Congress of Neuro-pharmacology, Rome, September, 1958*, ed. P. B. Bradley, Pierre Deniker, and C. Radouco-Thomas (Amsterdam, New York,: Elsevier, 1959), 21. Jean Delay would later reply to Lewis that thankfully, there was no need to choose between sociotherapeutic and chemotherapeutic methods and that they were complementary. Delay, "Introduction," 286.

[49] For a classic review see: Leona L. Bachrach, *Deinstitutionalization: An analytical review and sociological perspective* (Rockville, Maryland: National Institute of Mental Health, 1976); Kathleen Jones, "Deinstitutionalization in Context," *The Milbank Memorial Fund Quarterly. Health and Society* 57, no. 4 (1979).

[50] Most notably: Andrew Scull, *Decarceration: Community Treatment and the Deviant - A Radical View* (Englewood Cliffs, NJ: Prentice-Hall, 1977).

patients, in the context of the development of new social policies for these populations.[51] By the end of the 1970s, the search for the causes of deinstitutionalization had become a key battleground for competing visions of psychiatry.

A competition of revolutions

The number of controversies over these issues suggests that more was at stake than merely an appreciation of the true merits of neuroleptics. The debate over neuroleptics only made sense within a broader, though unevenly shared and differently interpreted, understanding that psychiatry was indeed undergoing a revolution. The popularity of the revolutionary imagery was at once a striking and relatively new dimension of postwar psychiatric discourse. It reflected a widespread sense that psychiatry was in the midst of major transformations and that psychiatrists could play a role in guiding these transformations and give them larger significance. This revolutionary rhetoric also encompassed antagonist accounts of progress and change among different professional groups and national communities. These differences reflected commitments to different visions of psychiatry as a practice and a science, as well as different understandings of change as both process and objective.

In this respect, the revolutionary rhetoric was neither universal nor obvious. This was well illustrated by the British case. Skepticism regarding chemotherapy could be expected from a champion of psychosocial treatment such as Lewis. The reluctance of William Sargant, a noted pioneer in biological treatment in Britain, to endorse the enthusiasm of his American colleagues

[51] Gerald N. Grob, *The mad among us : a history of the care of America's mentally ill* (New York ; Toronto ; New York: Free Press ; Maxwell Macmillan Canada ; Maxwell Macmillan International, 1994).

toward chlorpromazine might seem less self-evident.[52] In fact, the stance taken by British psychiatric elites towards psychopharmacological innovation reflected a pragmatic attitude to treatment that had made Great Britain a pioneer in clinical trials and clinical epidemiology. It was also predicated on a commitment to a realist philosophy of history, perhaps best expressed in 1968 by the Birmingham professor of psychiatry William Trethowan in his review of an American textbook on the history of psychiatry: "Despite what some may claim, there has been no really deep penetration at any point, and no major breakthrough, but steady wide pressure towards solving a number of problems. In the same vein, although it is often repeated that we are in the throes of a psychiatric revolution, it is likely that every generation of enthusiasts feels the same way. The word evolution may perhaps be preferred."[53]

In contrast, true believers in the psychiatric revolution were more numerous in France and the United States. In these countries, the psychiatric revolution developed into a political and moral concept. It referred not only to the need for change in psychiatry, but also to perspectives for social change that resonated with other social movements. In this respect, the psychiatric revolution was a project, a worldview, and a calling all at once. It also meant markedly different things in each country, reflecting different political and therapeutic cultures, and thus established a different framework for appreciation of the neuroleptic revolution.

French alienists had certainly held a measured attitude toward change throughout the early decades of the twentieth century, although some ardent reformers had come from their ranks starting in the late 1890s. In the interwar period, the leader of the Association of Asylum Psychiatrists (*Association Amicale des Aliénistes*) described the views of his colleague Edouard

[52] W. Sargant, "Aim and method in treatment: twenty years of British and American psychiatry," *J Ment Sci* 103, no. 433 (1957).
[53] W. H. Trethowan, *The British Journal of Psychiatry* 114, no. 510 (1968): 660.

Toulouse on psychiatric reform as "revolutionary", which was not intended as a compliment.[54] Just a few years later, in the wake of the liberation of France from German occupation, a new generation of young psychiatrists organized in 1945 a meeting that would be characterized by its organizers as the ferment of a "psychiatric revolution."[55] The meeting gathered asylum psychiatrists from all over the country and resulted in a draft for a new mental health law as well as a 24-point charter described by an organizer as "a sort of Tennis Court Oath of the psychiatric revolution we are dreaming of."[56] The draft was not discussed outside psychiatric circles, but from then on, this event would be recalled as "the psychiatric revolution of 1945" by psychiatrist reformers and their followers.[57] What was even more revolutionary than the legislative draft itself was the attempt by this small band of psychiatrists to shape their destiny and to inspire social change. They sought nothing less than a social movement.

Revolutionary imagery would remain a core dimension of the worldview of a significant part of French psychiatry for the next fifty years. Not only did it underpin psychiatrists' reform projects for both their discipline and society at large, it was also completely integrated into their very concept of therapy. By the late 1940s, the psychiatric revolutionaries of 1945 had developed

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[54] Georges Demay, "Services ouverts, quartiers d'observation et placement direct à l'asile," *Annales Médico-psychologiques* I (1928): 193.

[55] The leaders of the movement began to develop a narrative describing the events from 1945 as a revolution in the months following them, with an explicit reference to the French revolution of 1789. See especially: Georges Daumézon and Lucien Bonnafé, "Perspectives de réforme psychiatrique en France depuis la Libération," in *Congrès des médecins aliénistes et neurologistes de langue française. 44e session, Genève et Lausanne, 22-27 juillet 1946* (Paris: Masson, 1946). Georges Daumézon, "Informations syndicales. Rapport du secrétaire général," *Information Psychiatrique* 23, no. 10 (1947).

[56] Daumézon and Bonnafé, "Perspectives de réforme psychiatrique en France depuis la Libération," 586. The Tennis Court Oath (*Serment du jeu de paume*, in French) was the first formal act of defiance of the king's authority in the early days of the French Revolution.

[57] See: François Fourquet and Lion Murard, "Histoire de la psychiatrie de secteur ou le secteur impossible?," *Recherches*, no. 17 (1975).

a new approach to institutional treatment, which they labeled "institutional psychotherapy."[58] Influenced by American and British wartime research on group dynamics and therapy, institutional psychotherapy entailed the introduction into hospitals of occupational and leisure activities for the rehabilitation of patients. More profoundly, though, institutional psychotherapy was thought of as a technique to create momentum within the institutions. It was based on a series of motivational techniques aimed at stimulating hospital personnel to foment what some called an "internal revolution" in the wards.[59] Therapy, in this regard, coincided with a form of social change, albeit restricted to institutions.

French psychiatric revolutionaries were not laying out a grand project for postwar French society. In fact, most of them were wary of a psychiatrization of society that could be co-opted by conservative interests. By the 1960s, however, as a theory of social change, institutional psychotherapy had become a highly influential doctrine. It did so among a wide range of intellectuals, professionals, and activists in fields such as education, political science, sociology, and disability studies. Psychiatrists now found themselves at the vanguard of both the postwar modernization movement and the May 1968 revolution.[60] Indeed, the French psychiatric revolution seemed to resonate with every social movement of postwar French society. All the same, advocates of institutional psychotherapy did not see in neuroleptics an ally for their revolutionary endeavors. Institutional psychotherapists were puzzled by the ubiquity of neuroleptics in the psychiatric system by the end of the 1960s. Contrary to the dramatic

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[58] On institutional psychotherapy see: Henckes, "Le nouveau monde de la psychiatrie française.".
[59] The "internal revolution" was mentioned by François Tosquellès in Henri Ey et al., "Symposium sur la psychothérapie collective," *Evolution Psychiatrique*, no. 3 (1952): 537.
[60] Jean-Pierre Le Goff, *Mai 68, l'héritage impossible* (Paris La Découverte, 1998).. Robert Castel, *La gestion des risques : de l'anti-psychiatrie à l'après-psychanalyse*, Le Sens commun (Paris: Editions de Minuit, 1981); Sherry Turkle, *Psychoanalytic politics : Freud's French Revolution* (New York: Basic Books, 1978).

ceremony of shock treatment, which had played a major role in early institutional psychotherapy practices, the more banal distribution of pills did little to display psychiatric charisma to patients and nurses. Rather, as one French psychiatrist wrote, “the virtue of therapy had progressively faded” and psychiatry seemed to have lost its therapeutic outlook.[61] In addition, the science behind the drug revolution was being developed far from psychiatric hospitals, in university clinics and labs, largely without the participation of hospital psychiatrists.[62] In the end, the relationship between the promoters of the neuroleptic revolution and those of the psychiatric revolution in France would be built on mutual ignorance.

On the other side of the Atlantic, the American approach to the psychiatric revolution seems at first glance to have had strikingly similar features to the French situation.[63] In parallel fashion, a generation of “Young Turks” took advantage of the changing climate of the immediate postwar period to take over leadership in the profession. They formed the Group for the Advancement of Psychiatry (GAP) and developed a comprehensive vision for how psychiatry should evolve, which in many respects served as a blueprint for the Mental Health Act of 1963 and the launching of community psychiatry. However these psychiatrists thought of their endeavor as a renaissance rather than a revolution. In fact, revolutionary rhetoric appears to have first flourished outside the ranks of the GAP.

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[61] Pierre Bailly-Salin et al., "La passivité. Approche anthropologique, relationnelle et psychosomatique," *Journal de Médecine de Lyon*, no. spécial Journée de thérapeutique psychiatrique (1959): 86; see also Georges Daumézon, "Essai d'approche du savoir infirmier sur les psychotropes," in *Comptes rendus du congrès de psychiatrie et de neurologie de langue française. LXXVe session - Limoges - 27 juin 1977*, ed. Pierre Warot (Paris: Masson, 1977).
[62] Nicolas Henckes, "Reshaping chronicity. Neuroleptics and the changing meaning of therapy in French psychiatry, 1950-1975," *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 42, no. 4 (2011).
[63] Grob, *From Asylum to Community*; Pressman, *Last resort*.

For most of the postwar era, American psychiatry's approach to psychiatric revolutions was framed by the humanistic account of the history of psychiatry published in 1941 by the Russian-born psychiatrist and psychoanalyst Gregory Zilboorg.[64] Zilboorg identified two revolutions in the history of psychiatry, which had resulted in a new understanding of man and a deeper integration of madness as an irremovable dimension of humanity. The first had occurred in the sixteenth century under the impetus of the Renaissance protagonists Juan Luis Vives, Paracelsus, Agrippa, Weyer, and Jean Bodin, whose philosophical writings helped eliminate the practice of burning mad people as witches. The second psychiatric revolution coincided with Sigmund Freud's discovery of the unconscious at the turn of the twentieth century. Zilboorg celebrated Freud's revolutionary breaches in therapy, which stood in sharp contrast with the therapeutic nihilism of his time, and called Freud "the first humanist in clinical psychology." Even more so than psychoanalytic psychotherapy, it was "the principle of psychological determinism" that was truly revolutionary in inspiring a more comprehensive science of man.[65]

Writing just two years after Freud's death, Zilboorg implied that American psychiatry was in the midst of its Freudian revolution and that its full consequences had yet to come. But American psychiatry did not have to wait long for the emergence of a new generation of visionaries prophesizing the coming of a third psychiatric revolution. In 1952, the Austrian-born educator and group therapist Jakob Moreno did not fear to claim at the first conference on group psychotherapy that the creation of this technique was an event of the same importance as those that had constituted the first two psychiatric revolutions. The idea was further developed by his

[64] Gregory Zilboorg and George W. Henry, *A history of medical psychology* (New York,: W. W. Norton & company, 1941).
[65] Ibid. p. 509.

followers and remained an important discursive theme in this group for decades.[66] In a characteristic statement in 1966, Moreno predicted the glorious advent of a new society as a result of the dissemination of the technique he had helped to invent: "While the changes brought about by the First Revolution were institutional, and those by the Second psychodynamic, the changes brought about by the Third Revolution are due to the influence of cosmic and social forces. They are further transforming and enlarging the scope of psychiatry. . . . Their ultimate goal is a therapeutic society, a therapeutic world order which I envisioned in the opening sentence of my opus *Who shall Survive*?, […] 'A truly therapeutic procedure cannot have less an objective than the whole of mankind.'"[67]

By the 1960s, the narrative of the third psychiatric revolution had become increasingly popular. At the same time, what was meant by a "revolution" had shifted away from the humanistic perspectives promoted by Zilboorg and more toward a positivistic idea of therapeutic progress. Accordingly, the first revolution was now attributed to reformers of the early nineteenth century, including the British philanthropist William Tuke and the French physician Philippe Pinel , who had invented moral treatment and helped to develop asylum psychiatry. In the early 1960s in the US, the nascent group of community psychiatrists adopted the narrative of the "third psychiatric revolution" as an appropriate way to pitch the innovative ways of practicing psychiatry that were emerging in community mental health centers set up by the federal government.[68] Psychopharmacology supporters also soon embraced the narrative, so that

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[66] See especially: Rudolf Dreikurs, "Group psychotherapy and the third revolution in psychiatry," *International Journal of Social Psychiatry* 1, no. 3 (1955).
[67] J. L. Moreno, "The Third Psychiatric Revolution and the Actual Trends of Group Psychotherapy," in *The International Handbook of Group Psychotherapy*, ed. J. L. Moreno, et al. (New York: Philosophical Library, 1966).
[68] See especially: Leopold Bellak, "Community psychiatry: the third psychiatric revolution," *Handbook of community psychiatry and community mental health. New York: Grune & Stratton*

by the end of the 1960s, mental health had become the playing field of an out-and-out competition between revolutions. A psychiatrist writing in the late 1960s probably thought he would put an end to the dispute by suggesting that the third revolution had been underpinned by psychotropic drugs, while community psychiatry had simply inspired the fourth.[69]

Moreno's grandiloquence was certainly an expression of his somewhat inflated ego, but it reflected a perspective that was increasingly influential in postwar American society. As historians of psychology have shown, the contribution of psychologists and psychiatrists to the war effort, both within intelligence services and in managing the health of combat forces, had earned them the trust of a wide range of government officials, policy makers, and philanthropists and had helped make them one of the most influential professions of the Cold War period.[70] Psychologists and psychiatrists were not only selling their services to an ever increasing number of individuals in search of mental wellbeing. Their analyses were also serving to justify decisions on a broad range of geopolitical, family, public administration, and management issues. Their greatest achievement, however, may have been convincing a wide range of stakeholders that psychiatric expertise might bring about a new concept of citizenship based on democratic participation, promotion of the individual, and the management of antisocial impulses. The psychiatric revolution was to be a radical transformation of American society, a democratic feat indeed. Critics had no way to refute this vision. In his celebrated essay, *The Triumph of the Therapeutic*, sociologist Philip Rieff was left to wonder what concept of culture and what kind of

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964 (1964).

[69] Louis Linn, "The Fourth Psychiatric Revolution," *American Journal of Psychiatry* 124, no. 8 (1968).

[70] Ellen Herman, *The romance of American psychology : political culture in the age of experts, 1940-1970* (Berkeley: University of California Press, 1995); Grob, *From Asylum to Community*; Nikolas S. Rose, *Governing the soul : the shaping of the private self* (London ; New York: Routledge, 1990).

institutions were emerging from the hegemony of the therapeutic enterprise—but even he could do little to offer an alternative.[71]

Unlike in France, the neuroleptic revolution in America was completely integrated into the psychiatric revolution.[72] Beginning in the 1950s, tranquillizers became a crucial element of psychiatrists' and psychologists' therapeutic armamentarium and a key determinant of their success. Freudianism and the therapeutic ethos were not refuted but merely retuned by the pharmaceutical industry to promote their drugs. This also meant that consumerism and marketing, rather than citizenship, characterized the psychological culture of the Cold War period. This tension between American psychiatric revolutions would soon catalyze a reversal of opinions.

The bitter fruit of revolutions

In 1977, psychiatrist Gerald Klerman, then head of the US federal Alcohol, Drug Abuse and Mental Health Administration, concluded an uncompromising review on deinstitutionalization in the US and Europe on a rather grim note:

> The fear is that drugs and other behavior control technologies, if not controlled and regulated, combined with the anomie and isolation of urban life, will convert our communities into the ultimate total institution, a totalitarian society. Thus, we are faced with the visions—or nightmares—of 1984 and *A Clockwork Orange*. The dilemma is that

[71] Philip Rieff, *The triumph of the therapeutic. Uses of faith after Freud* (New York,: Harper & Row, 1966).
[72] Jonathan Michel Metzl, *Prozac on the couch. Prescribing gender in the era of wonder drugs* (Durham and London: Duke University Press, 2003); David Herzberg, *Happy Pills in America: From Miltown to Prozac* (The Johns Hopkins University Press, 2008); Andrea Tone, *The age of anxiety : a history of America's turbulent affair with tranquilizers* (New York: Basic Books, 2009).

> without new technologies, long-term changes in the mental health system are unlikely, and the creation of new community alternatives will depend upon the availability of new technologies. Thus, the issue of community treatment of the mentally ill is not only scientific and professional, but also social, ethical, and political in the broadest and most humane sense of those terms.[73]

The next chapter of the revolution is too well known. By the mid-1970s, the possibility that psychiatric revolutions might not liberate patients but on the contrary give birth to a nightmarish dystopia of social control had become a widespread concern in the mental health professions and western societies at large. The specific idea that social control was taking new forms in contemporary societies as community treatment and other technologies for controlling deviant people were replacing former practices of institutionalization was theorized on the European continent by scholars inspired by the work of French philosopher Michel Foucault.[74] The fact that psychiatric and psychological technologies, including drugs, operant conditioning, lobotomy, and electroconvulsive therapy, had become ubiquitous and might serve authoritarian projects became a far more widespread concern however. In the United States, the possible misuse of a wide range of "behavior control technologies" thus became a key focus in the emerging field of medical bioethics.[75] During the 1970s, the question was also increasingly

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[73] G. L. Klerman, "Better but not well: social and ethical issues in the deinstitutionalization of the mentally ill," *Schizophrenia Bulletin* 3, no. 4 (1977): 630.

[74] Françoise Castel, Robert Castel, and Anne Lovell, *The psychiatric society*, European perspectives (New York: Columbia University Press, 1982); Castel, *La gestion des risques : de l'anti-psychiatrie à l'après-psychanalyse*; Gilles Deleuze, "Post-scriptum sur les sociétés de contrôle," in *Pourpalers* (Paris: Editions de Minuit, 1990); David Armstrong, "The rise of surveillance medicine," *Sociology of Health and Illness* 17, no. 3 (1995); Rose, *Governing the soul*.

[75] David J. Rothman, *Strangers at the bedside : a history of how law and bioethics transformed medical decision making* ([New York, NY]: BasicBooks, 1991); Alexandra Rutherford, "The social control of behavior control: Behavior modification, individual rights, and research ethics

debated in many Western countries as the uses of psychiatry to repress dissidents in the Soviet Union and experiments in brain washing by intelligence services became known.

In many ways, this emerging scenario of social control was simply an extension of the idea in psychiatric thinking from the postwar period that therapy was political and that psychiatry in particular and mental health disciplines in general could play a role in creating a "therapeutic state."[76] What had seemed a rather comforting perspective for a society recovering from total war and entering a new era of wellbeing and consumerism appeared to be far less captivating three decades later. Concerns about psychiatrists' intentions led to a new climate of social critique and scientific skepticism.

By the early 1980s, an even more bitter perspective had come to pass. The technologies behind the psychiatric revolutions might in fact not be able to control much of anything beyond the noisiest manifestations of psychopathologies. Moreover, their shortcomings created new, more intractable forms of distress among the people they were supposed to serve most: psychiatric patients.[77] Unattainable cures and disabling side effects, lack of funding for psychiatric services, enduring stigmatization of patients and former patients, and poor recognition of their suffering were creating homelessness, poverty, and disability rather than empowerment and participation. The very foundations of both deinstitutionalization and the neuroleptic revolution itself were thus called into question.

Notwithstanding all their unfulfilled promises, the ideals of the psychiatric revolutions remained the only horizon for most protagonists of this unfolding drama. For the pharmaceutical

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in America, 1971–1979," *Journal of the History of the Behavioral Sciences* 42, no. 3 (2006).
[76] Michael E. Staub, *Madness is civilization : when the diagnosis was social, 1948 -1980* (Chicago: University of Chicago Press, 2011).
[77] For a similar reversal of attitudes regarding the therapeutic effects of antibiotics in the same years see the chapter by Scott Podolsky and Anne Kveim Lie in this volume

industry the stakes were particularly high. Its interests had clearly played a major role in building the consensus on drugs. Even so, psychiatrists and patients willing to opt out of drug treatment were left with few therapeutic alternatives. The mental health community faced a new dilemma: acknowledging the harm created by neuroleptics without imagining another path to progress.

Again, these perspectives were not universally shared either internationally or within national borders. In the 1970s, in many countries such as France, Germany, and Great Britain, a number of groups emerged that were critical of mainstream psychiatry and eager to develop alternative ways of treating mental patients. Most of these groups, however, consisted of mental health professionals, often psychiatrists, whose radical solutions to the enduring mistreatment of mental patients only rehashed earlier revolutionary rhetoric conceived by their forerunners. Much has been written on the "antipsychiatry" treatises of influential thinkers such as the American psychoanalyst and psychiatrist Thomas Szasz, the American sociologist Erving Goffmann, the British psychiatrist Ronald Laing, and the Italian psychiatrist Franco Basaglia. Yet even these arguments would have sounded familiar just two decades earlier.[78] Psychiatrists might well have thought that antipsychiatry had become a genuine social movement, but the truth is that in most countries this movement did not get much support from outside the mental health world.

Developments were more contentious in the United States. One major reason was the widespread climate in defiance of the connection of professional and industrial interests that seemed to underpin the crises in the health system. The very possibility that physicians contributed to the climate of denial and understatement surrounding the overuse and toxic effects of many drugs became central to the critique of medical power in the late 1970s. The crisis of minor tranquilizers and the politicization of LSD consumption were both instances of a profound

[78] Staub, *Madness is civilization : when the diagnosis was social, 1948 -1980.*

reversal of perspective on drugs that were once regarded as miraculous as neuroleptics.[79] The latter did not suffer from this dramatic change of mood. Nonetheless, by the mid-1970s, the long-term toxic effects of antipsychotic drugs had become a major source of concern among the psychiatric profession, health authorities, and pharmaceutical companies. The crisis was triggered by the gradual recognition of the severity and widespread character of disabling long-term effects known as tardive dyskinesia.[80] Several lawsuits were filed against companies starting in 1974, and after a period of denial, the American Psychiatric Association (APA) was eventually forced to issue a letter recommending a thorough assessment of the risk-versus-benefit balance before beginning long-term treatment.[81]

By 1980 a number of commentators had described the attitude of the psychiatric profession to tardive dyskinesia as a form of "panic".[82] Much more disturbing, however, were the cases of treatment refusal successfully brought to the courts by patients and civil rights activists in the second half of the 1970s. The fact that patients made use of their agency against the treatments that were supposed to restore this agency provoked a true shock among psychiatrists. Over time, the impetus given by these cases to the nascent movement of "psychiatric survivors" also created unease among the professionals who were the target of this movement. The most momentous of these cases was a suit filed by patients from the Boston State Hospital with the help of a social worker in 1977 and won in 1979. The court recognized their right to refuse treatment in cases other than an "emergency," for which it gave a restrictive

[79] Tone, *The age of anxiety*; Erika Dyck, *Psychedelic psychiatry : LSD from clinic to campus* (Baltimore, Md.: Johns Hopkins University Press, 2008).
[80] Moncrieff, *The bitterest pills*, 76 sq. P. Brown and S. C. Funk, "Tardive dyskinesia: barriers to the professional recognition of an iatrogenic disease," *Journal of Health and Social Behavior* 27, no. 2 (1986).
[81] Brown and Funk, "Tardive dyskinesia."
[82] Gardos & Cole, quoted by Moncrieff, *The bitterest pills*, 79.

definition. Psychiatrists were especially disturbed that the argument given by the court for its decision referenced the most fundamental constitutional right: freedom of speech. As in other cases of treatment refusal in other medical specialties, the judge mentioned the right to privacy and to make decisions significant for oneself. He also based the decision on the first amendment and argued that forced prescription of a psychotropic drug would breach the fundamental right to produce a thought.[83] "Whatever powers the Constitution has granted our government," he wrote, "involuntary mind control is not one of them, absent extraordinary circumstances. The fact that mind control takes place in a mental institution in the form of medically sound treatment of mental disease is not, itself, an extraordinary circumstance warranting an unsanctioned intrusion on the integrity of a human being."[84]

These very terms produced an upsurge of protest in American psychiatry. In subsequent years, several other American judicial decisions recognized that competent patients had the right to refuse treatment, even when they had been involuntarily committed into a mental health facility.[85] Psychiatrists prophesized that they would no longer be able to take a therapeutic stance and would have to care for a growing group of patients refusing medication who would, they claimed, "rot on their feet" in psychiatric institutions.[86] These perspectives may have been overstated, but as the former APA president and medicolegal expert Paul Appelbaum noted, this

[83] G. J. Annas, "Refusing medication in mental hospitals," *The Hastings Center report* 10, no. 1 (1980).
[84] cited after Paul S. Appelbaum, *Almost a Revolution: Mental Health Law and the Limits of Change* (Oxford University Press, 1994). Both parties appealed the decision, and the case was eventually brought to the Federal Supreme Court, which however did not pronounce and sent back the case to state courts. The last decision in the case, in 1983, confirmed the initial judgment.
[85] Which was not the case of all the Boston State Patients, a reason why their case was relatively easy.
[86] P. S. Appelbaum and T. G. Gutheil, "The Boston State Hospital case: "involuntary mind control," the constitution, and the "right to rot"," *American Journal of psychiatry* 137, no. 6 (1980).

moral panic among American psychiatrists revealed that they were uncomfortable with their own argument that drugs were as effective as they were claimed to be.[87] Appelbaum's recommendation, a decade after the Boston case, that psychiatry should reassert the therapeutic value of drug treatment and be confident in its healing powers, would probably not have been of much comfort.

True enough, the crusade against psychopharmaceuticals was more popular outside the psychiatric profession, among psychologists, social workers, and, above all, the now organized survivors movement. Psychiatrists who embraced this crusade became rapidly marginalized within the psychiatric establishment, but the crisis was not without consequence to the practice of mainstream psychiatry. Surveys conducted during the 1980s suggested that the prescription of neuroleptics had decreased over the previous decade.[88] There might have been different reasons for this trend, not all related to the side effects ascribed to the drugs. In any event, a new public attitude toward neuroleptics became widespread, mingled with growing concerns over the limits of deinstitutionalization and the fear that a significant part of the psychiatric population was being misbehaved by virtue of failed therapeutic and inefficient social policies.

Conclusion: Revolutions yet to come

Of all the therapeutic revolutions of the postwar era, the neuroleptic revolution was perhaps the most controversial if not the most consequential. The dream of finding a cure for one of the most intractable and elusive disorders had set excessively high expectations among psychiatrists and broader communities interested in mental health. More profoundly, however,

[87] Appelbaum, *Almost a Revolution*.
[88] Wysowski DK and Baum C. "Antipsychotic drug use in the United States, 1976-1985". *Archives of General Psychiatry* 46, n° 10 (1 October 1989): 929-932.

the wider significance of mental health in Cold War societies as well as increasing differentiation within the psychiatric world created a foundation for widespread conflict over any single mental health issue. As this chapter has argued, differentiation and conflict, rather than standardization and consensus, characterized the arena of neuroleptic use from the 1960s on. While there were many reasons to see a revolution in the profound transformations that affected psychiatry from the 1950s, there were also many reasons to contest every statement formulated about a singular revolutionary process. In many ways, the very idea of a neuroleptic revolution overdetermined any discourse about change and progress.

In spite of these many criticisms, the neuroleptic revolution remains alive and well in contemporary psychiatry. The mental health world has been largely shaped by the outcome of the cycle of reforms and transformations from the 1950s to the 1970s. Even though there have been a number of calls for the re-institutionalization of patients in the last twenty years, the landscape of mental health care is still characterized by fewer beds and the search for community alternatives. Although psychiatric research has developed and explored a number of other avenues to find cures, the dominant approaches to mental disorders today remain those biological models developed in the wake of the neuroleptic revolution. Furthermore, neuroleptics remain one of the main sources of therapeutic innovation and a major generator of profits in the mental health sector.[89] In many ways, there is no escaping the neuroleptic revolution.

And yet perhaps the most significant legacy of the neuroleptic and psychiatric revolutions of the 1960s and 1970s might be the very idea of the revolution itself. While it might be argued that the cycle of changes and reforms that began in the 1950s has now come full circle,

[89] According to figures from the healthcare information company IMSHealth, the single best-selling drug in 2013 in America was an antipsychotic. See: IMS Institute for Healthcare Informatics, "Medicine use and shifting costs of healthcare. A review of the use of medicines in the United States in 2013," (Parsippany, NJ: IMS Institute for Healthcare Informatics, 2014).

revolutionary rhetoric has perhaps never been as pervasive in psychiatric discourses on progress and change as it is today. Virtually every innovative basic science approach to mental illness -- from genomics to “phenomics” to brain imagery to big data analysis -- is greeted with the promise that it will revolutionize mental health. Other more psychosocially oriented segments of psychiatry are equally quick to use revolutionary rhetoric to publicize their innovations. The contemporary recovery movement in the field of psychiatric rehabilitation is a good example of this tendency. Such grand promises are clearly explained by the need to attract funding at a time of constricted budgets and intensifying competition between divergent approaches. But this rhetoric also testifies to the living spirit of postwar revolutions.

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