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*For  
Peter Hacker*



**Also by M.R. Bennett**

Autonomic Neuromuscular Transmission  
Optimizing Research and Development  
Idea of Consciousness  
History of the Synapse  
Philosophical Foundations of Neuroscience  
(with P.M.S. Hacker)  
Neuroscience and Philosophy  
(with D. Dennett, P.M.S. Hacker & J. Searle)  
History of Cognitive Neuroscience  
(with P.M.S. Hacker)

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# Preface

Virginia Woolf, perhaps the greatest narrative writer in English of the twentieth century, had a tragic life. Her suicide at 59, in 1941 during the Second World War, was the final act in a series of earlier attempts against a background of sexual abuse and the loss of members of her loving family. This final act had its additional stress engendered by the extraordinary circumstances that Britain faced in the years just prior to her death, with the bombing of her home in London and of the flights of German raider aircraft close to her country residence near the coast. Because of her literary genius, we find in her novels, plays, critical reviews, autobiographical sketches and diaries an unparalleled insight into the mind of someone destined to end their life. These offer those concerned with mitigating the incidence of suicide a unique opportunity to consider the circumstances and familial burdens that promote severe depression and so design programs that will ameliorate them.

The essays brought together in this work are an attempt to begin this process of understanding and are grouped into three parts. The first of these is concerned with those aspects of Virginia Woolf's life that are pertinent to her depression, and how this was treated by the leading psychiatrists in Britain in the first half of the twentieth century, including King Edward's psychiatrist Sir Maurice Craig as well as Sigmund Freud. These lead to the major essay in Part I that outlines how we now view the significant factors leading to depression and suicide from a contemporary neuropsychiatric perspective, particularly in the circumstances of early childhood abuse. This also provides an introduction to the following neuropsychiatric presentations in Part II. All four essays in the first part should be of interest to the general reader. They have been written in a style which I hope will promote understanding of the issues involved, and what needs to be done to gain further insights into the maladies of concern.

Part II provides a neuropsychiatric analysis of the state of present knowledge concerning what goes awry in the functioning of the brain in depression, particularly that leading to suicide. The five essays here are meant for the cognoscenti in neuropsychiatry, but I hope that the general reader, by dipping into them, might gain some appreciation of how far we have probed brain functions related to major psychiatric problems. The first two essays are on identifying networks coupling different parts

of the brain that have now been shown to have abnormal function in depression. Particular emphasis is placed on how this might arise as a consequence of childhood abuse and of later-life stress and anxiety. The next two essays are concerned with the action of drugs that might help restore normal function in the brain networks, such as the anti-depressant Prozac, and a new class of drugs that hold out hope of militating against the circuit changes that are very likely to occur following childhood abuse. Virginia Woolf suffered from psychosis, with auditory hallucinations, throughout her life. The final essay in this Part II considers these and the likely brain networks involved as well as what might be done to correct their functioning.

This emphasis on brain networks and their constituent neurons and connections, the subject matter of neuropsychiatry, might lead the general reader to think that patients are to be considered as complicated machines, as automotons. Such an attitude obviously debases what it means to be human, a particularly unfortunate attitude towards those suffering from depression so severe that suicide is contemplated or acted on. The essay in the final Part III shows that the mechanistic study of brain function in relation to mental illness does not logically lead to this perspective. The concept of 'mind', that which goes awry in mental illness, has undergone many transformations since it was first used by Plato. Virginia Woolf, famous together with William James, for emphasizing the 'stream of consciousness' in her work, had a particular view of the mind and of consciousness that harks back to Descartes. This final essay shows that the views of both Plato and Descartes on mind and consciousness lead to an illogical and degenerate view of what it means to be human. It is to Aristotle that we must turn if we are to restore dignity to what it means to be human while pursuing neuropsychiatry.

It might surprise the reader that these essays were inspired by Sigmund Freud. I asked myself, if Freud were alive today what would he do with his life? Unequivocally, my answer was that he would be a neuropsychiatrist. Freud began his creative life as a neurophysiologist, during which time he showed prodigious powers of experimental observation and technical ability. He was one of the first to recognise neurons as individual cells as well as to study the actions of cocaine, subsequently shown to be a local anaesthetic. He was unable to find suitable stable employment as an academic in the new field of neurophysiology, following these great discoveries, and so became a general practitioner, during which time he began to see patients suffering from hysteria. So began the development of psychoanalysis for which he is known today, and which is briefly described in Part I. Of considerable surprise here is that Freud's early Seduction Theory rested on a frequency of childhood sexual abuse that was unacceptable and regarded by his contemporaries as scandalous, leading to his abandoning it. We now know, as indicated at the end of this part, that the occasions of childhood sexual abuse are indeed high, and that they have terrible consequences for the future life of the child, as Freud would have probably predicted.

Nevertheless, Freud never left the attempt to relate the maladies of mental life that he observed in his patients to changes in the neurons and the networks they form in the brain. He realized that this attempt was virtually hopeless, given the state of ignorance of the neural networks of the brain during his lifetime, but nevertheless he felt driven to make an attempt. Contemporary neuropsychiatry embodies

this attitude, but now, as the essays in this work show in Part II, we have the tools to make significant contributions in defining what has gone awry in brain networks that give rise to the mental conditions which Freud identified in his patients and for which he strove unsuccessfully to find a neural basis. I like to think that the neural networks underling major mood disorders provided in Part II bring Freud's sketches up to date.

Finally, Freud has been something of an inspiration in relation to the last Part, given over to consideration of spirit, soul and mind in the work of Virginia Woolf. There are many photographs of Freud's famous studies and consulting rooms where he met his patients, including Virginia Woolf in London. These photographs show Egyptian artefacts dating back to the third millennium BCE on his desk and on display shelves. At this time the Egyptians were the first to envisage the concept of a 'soul', one they elaborated on in sophisticated detail that laid the foundations for all further considerations of the spiritual. It was then natural that Freud, given his pre-occupation with the mind, should surround himself with such sculptures. I have made an attempt in the last chapter to consider 'spirit', 'soul' and 'mind' in an historical and philosophical context, including that of Virginia Woolf's work as representative of contemporary views on this subject. For without clarity as to what we mean by 'mind' how can neuropsychiatry contribute in significant ways to the amelioration of 'mental illness'?

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M.R. Bennett



## Note to the Reader

These essays are divided into three Parts as mentioned in the Preface, of which the first and last should be immediately accessible to the general reader. The middle Part is largely for the neuropsychiatric cognoscenti. I have therefore provided extensive notes at the ends of the essays in the first and last Parts so as to allow the general reader the opportunity of delving deeper into the subject matter if they should be so inclined. These notes also give references to the material that supports the various claims made. The collection of essays in the middle Part are presented in a more formal academic style, with references provided to all the claims made as to the function of brain networks. This is the case, except for essay 8 in which I have retained the note style of the earlier essays. This has been done in order to promote an understanding amongst the general readers of the great promise that the approaches outlined there have for ameliorating the suffering of those, like Virginia Woolf, that have experienced childhood abuse.



# Contents

## Part I Introduction

<b>1 Sexual Abuse, Literary Genius and a Mind Gone Awry .....</b>	<b>3</b>
References.....	8
<b>2 The Development of Early 20th Century Psychiatry and Its Failure .....</b>	<b>9</b>
Introduction.....	9
Notes .....	16
References.....	17
<b>3 Freud, the Subconscious and Virginia Woolf .....</b>	<b>19</b>
Notes .....	29
References.....	29
<b>4 Virginia Woolf's Suicide.....</b>	<b>31</b>
Stress.....	35
Anxiety.....	39
Depression.....	39
Childhood Abuse: Stress, Depression and Suicide in Later in Life.....	41
Notes .....	45
References.....	59

## Part II Neuropsychiatry and Suicide

<b>5 Brain Networks, Hormones and Genes Implicated in Depression.....</b>	<b>67</b>
Introduction: The Prefrontal–Limbic Network (PLN) in Depression .....	67
Hypothalamic–Pituitary–Adrenal (HPA) Axis Modulation of PLN in Depression .....	69



- Basal Ganglia Modulation of PLN..... 69
- Midbrain Modulation of PLN ..... 70
- Modulation of the PLN by the Hypothalamus in Depression..... 70
  - Glucocorticoid Modulation of the PLN ..... 70
  - Epigenetics and Depression ..... 73
  - Conclusion..... 80
- Modulation of the PLN by the Basal Ganglia in Depression..... 81
  - The PLN–Basal Ganglia Loop..... 81
  - The Habit-Learning Basal Ganglia Networks..... 85
  - Conclusion..... 86
- Modulation of the PLN by the Midbrain in Depression ..... 87
  - The PLN-Midbrain Loop ..... 88
  - The PLN–Ventral Tegmentum Loop ..... 91
  - The PLN–Raphe Nucleus Loop ..... 93
  - Conclusion..... 95
- The PLN and Depression ..... 96
- References..... 96
  
- 6 The Pathology of Synapses in Brain Networks**
- Implicated in Depression** ..... 107
- Introduction..... 107
- The Volume Fraction of Human Cortical Grey Matter  
Occupied by Different Cellular Constituents..... 108
- The Core Pathology of Synapse Regression  
in the Cortical Grey Matter of Stressed Animals..... 115
  - Anterior Cingulate Cortex..... 116
  - Orbitofrontal Cortex..... 117
  - Prefrontal Cortex ..... 117
  - Hippocampus..... 117
- The Effects of Synapse Regression on the Cellular  
Constituents of Cortical Grey Matter in Animals ..... 119
- Changes in Grey Matter and Its Cellular Constituents  
in Major Depressive Disorder ..... 120
  - Anterior Cingulate Cortex..... 120
  - Orbitofrontal Cortex ..... 121
  - Hippocampus..... 121
  - Prefrontal Cortex ..... 122
- Conclusion ..... 122
  - The Cellular Constituents of Human Cortical Grey Matter..... 122
  - The Cellular Basis for the Loss of Grey Matter  
in Major Depressive Disorder (MDD) ..... 124
- References..... 124
  
- 7 On the Mechanism of Action of an Anti-depressant**..... 133
- Synaptic Connections of the Anterior Cingulate  
Cortex and the Amygdala ..... 133

Changes in Synaptic Connections of the Anterior Cingulate Cortex and the Amygdala in Depression ..... 135

Changes in Synaptic Connections of the Anterior Cingulate Cortex and the Amygdala of Depressed Patients Following Serotonergic Uptake Blockers ..... 137

The Mechanism by Which Changes in Serotonin Transporters Bring About Changes in Synaptic Activity in Anterior Cingulate Cortex and Amygdala 5-HT Receptor Distributions on Neurons and Their Interaction with NMDA Receptors..... 137

The Mechanism by Which Changes in Serotonin Transporter Genes Alter the Level of Excitability in Anterior Cingulate Cortex and Amygdala ..... 138

The Mechanism by Which Serotonin Transporter Antagonists Alter the Level of Excitability in Anterior Cingulate Cortex and Amygdala ..... 139

Conclusion ..... 141

References..... 141

**8 On the Identification of Drugs Modulating Epigenetic Mechanisms in Depression ..... 145**

Introduction: A Proposal for the Most Efficacious Course to Lower Rates of Suicide..... 145

Childhood Abuse: Stress, Depression and Suicide in Later in Life ..... 146

Interventions Preventing Suicide Arising from Childhood..... 147

Gray Matter Changes in the Cortex Following Child Sexual and Physical Abuse ..... 147

Behavioural Therapies for Sexually Abused Children..... 148

    Cognitive Behavioural Therapy (CBT)..... 148

    Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) ..... 148

    Child Centred Therapy (CCT) ..... 149

Childhood Abuse, Depression, Suicide and Epigenetic Drugs..... 149

Identification of Epigenetic Drugs for Mood Disorders:

    The HDAC Inhibitors ..... 150

    Epigenetic Drugs and Suicide Prevention..... 151

    What Remains to be Done ..... 151

Notes ..... 152

References..... 160

**9 Brain Networks in Psychosis..... 165**

Introduction..... 165

Consciousness ..... 166

Perceptual Consciousness ..... 167

    Awareness and Perception..... 167

    Attention and Perception..... 168

Visual and Auditory Illusions ..... 169

Visual Illusions..... 169

    Kanisza Illusions ..... 170

    McCullough Illusions..... 170

    Movement Illusions..... 170

    Synaesthesia ..... 171

    Binocular Rivalry ..... 172

Auditory Illusions ..... 172

    Continuity Illusion ..... 174

    Auditory Illusions and Mismatch Negativity ..... 174

    Summary ..... 175

Visual Hallucinations ..... 175

    Claude Bonnet Hallucinations..... 175

Auditory Hallucinations..... 176

    Types of Auditory Hallucinations ..... 176

    Auditory Hallucinations in Psychosis ..... 177

    Summary ..... 177

Deafferentation Hypothesis for Visual  
and Auditory Hallucinations ..... 177

    Deafferentation of Visual Centres ..... 178

    Deafferentation of Auditory Centres..... 178

    Summary ..... 179

Determination of the Brain Areas Involved in ‘Attention’ ..... 179

    Visual Attention ..... 179

    Auditory Attention ..... 180

    Summary ..... 182

Determination of Brain Areas Involved in Awareness..... 182

    Visual Awareness ..... 182

    Auditory Awareness ..... 184

    Summary ..... 186

Conclusion: Attention and Awareness in a Psychosis..... 186

References..... 187

**Part III On Mental Illness**

**10 The Mind, Mental Illness and the Stream of Consciousness ..... 193**

    Notes ..... 201

    References..... 209

**Index..... 211**

# Part I

## Introduction

This Part I first includes a description of Virginia Woolf's life from the point of view of psychiatry (Chap. 1), and then goes on to describe how the leading psychiatrists of the day in early twentieth century England treated her malaises (Chap. 2). As Sigmund Freud was first introduced to England through publication of his works by the Hogarth Press that Virginia and her husband Leonard Woolf founded, and as she consulted him towards the end of her life, special emphasis is given to Freud in Chap. 3. This Part I concludes with an introduction to how twenty-first century neuropsychiatry considers depression, especially that arising largely from childhood abuse, as a disease of the brain.

# Chapter 1

## Sexual Abuse, Literary Genius and a Mind Gone Awry

### Virginia Woolf: The Interleaving of Literary Precociousness and Major Depression

Nowhere do we have a more detailed and powerfully moving record of repeated episodes of decline into and recovery from mental illness than that in the life of Virginia Woolf, perhaps the finest narrative writer in English in the twentieth century (Fig. 1.1). Her diaries and letters provide an unparalleled insight into experiences spanning nearly 50 years, if the cottage industry of interpretations of her novels in terms of events and experiences in her own life are set aside. A short account of that life is given here as a prelude to considering which of the various opposed revolutions in psychiatry at the beginning of the twentieth century had anything to offer to militate against her suffering.

Virginia Woolf was sexually abused by her half-brothers as a child and adolescent. When she was 38 in 1920 she gave a talk to the Memoir Club, which had been established by Freudians, with the title '22 Hyde Park Gate', the address of the house she resided in as a child. In this disturbing talk she described how George Duckworth, her half-brother, came to her bedroom at night and committed various 'malefactions' over a period lasting from childhood to late adolescence. These experiences 'had spoilt her life for her before it had fairly begun' (DeSalvo 1989, pp. 3, 5, 100, 121). Virginia had her first bout of major depressive illness during this period of sexual abuse, precipitated by the stress brought on by her mother Julia Stephen's death when Virginia was 13 in 1895 (Fig. 1.2). Two years later, when she was 15 and the sexual abuse came to an end, her half sister died after running the Stephen's household since Julia's death. This engendered another period of severe stress, which surprisingly she managed to survive without a breakdown. But that was only deferred for at 22, after her father's death from stomach cancer in 1904, she tried to commit suicide by jumping out of a window and was briefly institutionalized (Fig. 1.3a).

Some 6 years later, in 1910, Virginia broke down again following the death of her brother Thoby Stephen from typhoid. He was only 26. The sense of the loss of Thoby was heightened by the fact that both of them had contracted typhoid after visiting Greece but she alone recovered and bore the guilt of survival. After the death of her father and brother she worked intensely on her first novel, *The Voyage Out*, in a concentrated effort to put behind her the loss of these loved ones. But this

**Fig. 1.1** Portrait of Virginia Woolf by George Charles Beresford, 1902, © Hulton-Deutsch Collection/CORBIS



did not succeed in relieving the stress that precipitated her third breakdown. This necessitated her rest in the Twickenham asylum in the summer of 1910, during which time she seemed to have made a complete recovery. Her sister Vanessa's husband, Clive Bell, commented on visiting Virginia that his formerly suicidal sister-in-law seemed 'transformed .. suddenly life, which she had found drab and dreary, had become thrilling and precious .. everything seemed exciting or amusing .. and all the trivial things that made up that existence had significance too. The magician had cast her spell' (Woolf and Bell 1977, vol 1, p. 164).

That spell was not to last for Virginia suffered a fourth breakdown 3 years later when she was 31, shortly after her marriage to Leonard Woolf and the completion of her novel *The Voyage Out*. Her convalescence back to health, now with the loving support of Leonard, took an extended period, from 1913 to 1915. It might be anticipated that her marriage to Leonard Woolf precipitated, at least in part, her fourth breakdown, but that is very unlikely. Leonard played a principal role in maintaining her stability during the years of her greatest creativity, helping her to ward off deep depression, and so allowing her full expression of her extraordinary narrative gifts (Fig. 1.3b).

Nevertheless, periods of depression that did not lead to breakdowns were still experienced, although frequently analysed and used to support her literary work. She comments in 1924 at 42, writing critically about the Stephens, their 'cold fingers, so fastidious, so critical, such taste', she adds: 'My madness has saved me'

**Fig. 1.2** Portrait of Julia Jackson, Virginia Woolf's mother, by Julia Margaret Cameron, 1867. © SSPL/National Media Museum/Getty Images



(Nicolson and Banks 1975, vol. 3, p. 92). In 1930 she wrote in her *Diary* 'I believe these illnesses are in my case--how shall I express it?--partly mystical' (Woolf and Bell 1977, *Diary* 3, p. 287). Her essay, 'On Being Ill' described the 'astonishing' spiritual changes she experienced. 'Undiscovered countries' are revealed 'when the lights of health go down'. Only a 'lion tamer' would have the strength 'to look these things squarely in the face'. 'There is a virgin forest in each' (Woolf 1947, p. 10). She describes two mildly depressed episodes in her diary as follows:

'Here is a whole nervous breakdown in miniature. We came on Tuesday. Sank into a chair, could scarcely rise; everything insipid; tasteless, colourless. Enormous desire to rest ... avoided speech; could not read. Thought of my own power of writing with veneration, as of something incredible, belonging to someone else; never again to be enjoyed by me. Mind a blank. Slept in my chair. Thursday. No pleasure in life whatsoever; but it felt perhaps more attuned to existence. Character and idiosyncrasy as Virginia Woolf completely sunk out. Humble and modest. Difficulty in thinking what to say.'

Virginia writes further:

'Considering how common illness is, how tremendous the spiritual change that it brings, how astonishing, when the lights of health go down, the undiscovered countries that are then disclosed, what wastes and deserts of the soul a slight attack of influenza brings to light...it becomes strange indeed that illness has not taken its place with love, battle, and jealousy among the prime themes of literature. Novels, one would have thought, would have been devoted to influenza; epic poems to typhoid; odes to pneumonia, lyrics to tooth-ache. But no; ... literature does its best to maintain that its concern is with the mind; that the