



Sound Evidence, Sound Reasoning, Sound Ethics
He whakaaturanga pono, he puutake pono, he matatika pono

New Zealand Schizophrenia Research Group

**20th Annual Research Meeting, 18th/19th November, 2013,
Auckland Medical School,**



Ernst Kretschmer (1888-1964) "Holistic biologists"

Historical Perspective: Ernst Kretschmer (1888-1964).

I've often introduced these meetings with profiles of significant people from the past. Ernst Kretschmer was not prominent in research on schizophrenia, but in times of revolutionary change – and I think that's where we are at present - he is, I think a man for our times.

What do it mean by that provocative remark? I think that there are two issues here - (i) In health care systems generally there is, I believe, a move towards democratization in many countries, and many areas of medicine, which has no precedent. (ii) In psychiatry, again in many countries, I get the idea that fundamental rethinking is going on about our concepts of mental disorder. This is in part related to the move towards democratizing mental health services. On the whole, I approve of both. The shift towards democratization is of course essentially political; the conceptual shift is fundamentally an intellectual struggle, but inevitably will also become political. That is where we are at in psychiatry, I believe.

On the conceptual rethinking, my own views have shifted a good deal in the last few years, and are starting to become more coherent and

consistent, about the nature of the shift. I also have to say, that in no way does this undermine or lead me to renounce any of the neuroscience research I have done – either on basic brain mechanisms, or on their application to mental disorders – but it means viewing them in a broader perspective. If I could draw a historical analogy: When Einstein developed his theory of relativity, it did not undermine Newton's scheme for the physical universe; but it saw it as a special case in a broader scheme of things. In any time of major change one doesn't know – and in this case, I don't know - the outcome - on either of these issues. I don't know whether what is best from either an intellectual or a health-care point of view will actually prevail.

My own reading has been much wider in the last few years than when I was working on the theory of the disorder called schizophrenia – partly because I have been exposed to many more issues as a community representative on committees of Royal College of Psychiatry. One huge, fascinating book which I ploughed through by Henri Ellenberger – *Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry*, opened up that alternative tradition for me – alternative to the biomedical side of psychiatry. It is now I believe possible to work out a full and detailed integration of the dynamic tradition, which is very old, but which was brought within general medicine at the time of Sigmund Freud, and the biomedical sides of psychiatry, originally closely allied to neurology and institutional care. I think it is becoming possible to do that in a way which is quite holistic, spanning basic brain mechanisms, psychological, social, and spiritual insights into what is called mental illness (a term which I am increasingly shifting away from, without denying the severity of suffering in this area.). I prefer the term mental disorder but I try to be flexible about terminology.

The other book I read last summer was by Ernst Kretschmer's *Hysteria, Reflex and Instinct*. Let me tell you a bit about Kretschmer. He was German, but from the generation after Sigmund Freud in Vienna. That meant that, as a newly qualified doctor, and as a general physician (although he had already qualified in psychiatry) he was involved in military medicine in the first World War. So, in a hospital in South Germany had saw very many soldiers coming in from the front, suffering what on the British side, would be called shell-shock – but which actually had a lot in common with what Freud made his name studying – hysteria. So, Kretschmer saw far more cases of hysteria than ever did Freud – and in men. On the basis of this, Kretschmer wrote his work *Hysteria, Reflex and Instinct*, first published in 1923. A later

edition, was published towards the end of his life (in 1960), obviously much expanded with experience from civilian cases of hysteria, some of them from as late as the 1950s, and I read an English translation dated 1961.

In 1933 Kretschmer was President of the German psychotherapy society. When Hitler came to power, he resigned that position, because Jewish people were no longer permitted to belong (Kretschmer was not himself Jewish.). Carl Gustav Jung took over the role. He was not German but Swiss, which was safer, and the society was reconfigured as the International Psychotherapy Society, under which banner, Jewish people could still join. During WWII, Kretschmer was Professor in a small university town called Marburg (which I know), and after the war became Professor in a larger centre, Tübingen, which I know very well, almost my second home in the northern hemisphere. In July I made a visit there, and met the current head of that department, Andreas Fallgatter. There, on the wall, were photos of a succession of previous heads, one of them in military uniform, obviously a member of the Nazi party, and next to him, a photo of Kretschmer. He was one of the very few German psychiatrists who came through the Hitler years, alive, still in Germany, still with his reputation intact. Apparently, even in the middle of WWII, he used to give public lectures where he said something like this: “Of course, psychopaths are always with us. In the best of times, our job is to evaluate them; in the worst of time, they control *us*.” . . . and he got away with it. It was very clever, because it was not accusing anyone of anything, although it was dropping an enormous hint; which no-one in authority could acknowledge, because it would mean that they understood the hint, and that they were themselves the target. It was also extremely courageous.

Let me say a bit about his book, *Hysteria, Reflex and Instinct*. He was of course fully aware of all the debates in Vienna and Paris, leading to the dynamic tradition in psychiatry being brought within the medical area – although always as an uneasy bedfellow. He clearly had a profound insight into human emotions in extreme circumstances, seeing them as very similar to what you can see in most mammalian species; so he was in tune with the discipline called ethology – study of animal behaviour – just like his near contemporary – the Swiss psychologist, Jean Piaget. In the 2nd edition, which I read in translation, he was certainly aware of contemporary trends in neuroscience (citing the work of one of the Nobel laureates in neuroscience from 1949), and he incorporated such evidence into his arguments. He had absorbed the idea

that the brain is organized on hierarchical principles, an idea which goes back to the British nineteenth century neurologist, John Hughlings Jackson, and before him, Herbert Spencer – using the idea as did Jackson, to explain how, when the top level can no longer function, or is overwhelmed, lower levels take over. Like Freud and Jung, he paid close attention to the unique life story of each of his patients, as an essential component to understanding their problems (a style which is not so strong in the bio-medical tradition). However, unlike Freud or Jung, I find him not only a highly credible scientist, but, in his holistic approach to human nature, someone with a special message for today. Twenty five years after he died an appreciation of Kretschmer was written by a man called Heinz Haefner – who is still alive, and I met him ten years ago. I think he was a student of Kretschmer, in Tübingen in early post-war years. The phrase I remember captures the essence of Kretschmer's approach "Holistic Biologism."

The Term ‘Schizophrenia’, Diagnosis in Psychiatry and DSM-5.

On 18th May this year, amid considerable controversy, the American Psychiatric Association released the latest edition of its diagnostic manual – DSM-5 (Diagnostic and Statistical Manual, 5th Edition). Shortly before it was released, the US National Institutes of Mental Health (NIMH), the largest funder of research into mental health world-wide, issued a public statement that it would no longer support use of DSM categories for research it funded, on the grounds that these categories lacked validity.

If psychiatric diagnoses are to be regarded as scientific concepts, that is obviously true, in my view. NIMH preferred instead to work towards concepts of mental disorder (and diagnoses) based on evidence from “genetics, imaging, cognitive science and other levels of information to lay the foundation for a new classification system”. That leaves innumerable questions unanswered.

A few days after this announcement, the British Psychological Society also came out against DSM-5, but on diametrically opposed grounds.

Implicitly, this body challenged the very concept of diagnosis in psychiatry, based on medical models, viewing those diagnoses as reflecting “subjective judgements . . . related to current normative social experiences.” It would prefer “a revision of the way mental distress is thought about”, with increased emphasis on social factors such as poverty, unemployment and trauma.

The *New Zealand Schizophrenia Research Group*, having the word “Schizophrenia” as part of its identity obviously has a stake in these controversial matters. However, in our Mission Statement, it is made clear that we are by no means uncritical defenders of the *status quo*. The following sentence appears in the NZSRG Mission Statement:

“The term ‘schizophrenia’ is used in a broadly-inclusive way, in acknowledgement of continuing debate about definition of this term, the need to use different terms in different contexts, and the possibility of international shifts in terminology in the future.”

The concept of schizophrenia as presently formulated is not a very good one, as scientific concepts go, but, in my view, it is not completely useless. There is something very important there which seeks a better definition. So, part of my own agenda, perhaps that of others in NZSRG, is to work

towards refining, and perhaps re-defining this concept (rather than abandoning it, as some would want to do). Then, it might be better able to serve the true purposes of a diagnostic label - to help guide treatment, public health measures, self-education by those most immediately affected, and as a focus for research. In the end, there may well be a shift in terminology, but that is too big for us to contemplate, although I hope some of us can be part of the discussions.

One argument against using the term “schizophrenia”, coming especially from service users, is that it is inherently stigmatising. For myself, I never really felt it so, although I’ve been on the receiving end of plenty of discrimination. I suppose I never took the stigmatizing implications seriously, nor did I take the concept as a serious scientific one; and in the end, my scientific curiosity got the better of me. I felt, what a fascinating journey to be embarked on, as neuroscientist, with this diagnosis on my head; and nowadays, I wear it like military medal.

More seriously, as a scientist, it is my hope that, in the process of clarifying this concept, it is likely that the stigmatizing connotations which many people feel to be associated with this diagnosis will be reduced. If the term gets a better definition, it will be more useful, and therefore less stigmatising.

Historically the concept of schizophrenia was never free from controversy. Emil Kraepelin, whose concept of dementia praecox was the forerunner of the term schizophrenia, initially thought he could use clinical evidence to separate this disorder from manic depressive illness (which became “bipolar disorder”); but by the end of his life, even he conceded that, using clinical criteria, which was all he had to go on, this distinction could not be made very reliably. We do nevertheless know that, of the various treatments available, some are often effective in the disorder called “schizophrenia”, others in “bipolar disorder”; yet there are plenty of exceptions, where the best treatment for one of these disorders proves to be the one expected to be best for the *other* disorder. This suggests that there *is* an important distinction to be made, but one which cannot be made with 100% reliability on the basis of clinical evidence. The same could be said about many other disorders in psychiatry. Diagnoses do not yet serve their proper purposes very well.

In recent years, as indicated in the statement from the British Psychological Society, the focus has shifted toward social causes of mental illness (or as *they* would prefer “mental distress”). These factors are certainly important, and, whether or not they are the root causes, they

undoubtedly compound the problems with which mental health professionals have to deal.

I would also like to say that the focus on trauma and abuse should not be taken to mean that the very concept of “mental illness” is redundant. Many people who receive psychiatric diagnoses would identify their experiences as a form of illness. I did initially, although I see it somewhat more broadly nowadays. Many others would not use the illness concept at all. So, I ask: Is illness the right term?

The concept of illness adopted from general medicine may still be applicable in psychiatry, although certainly not to all the issues dealt with in psychiatry. It is a matter of controversy and change at present. When it is applicable, it may need to be adapted and qualified, perhaps in substantial ways, to meet realities of the relevant mental disorders.

A metaphor may be helpful here: We could view a major disorder such as “schizophrenia” as the main “trunk” of a large tree. Perhaps it is two trunks, growing close together, to take into account the unresolved relationship between this and bipolar disorder. However, surrounding this main trunk (or perhaps two trunks), are a number of surrounding “creepers” or “vines” of substantial size, which are not easily separated from the main trunks, and may be thought by some people to be intrinsic parts of the main tree. However, other people may see these “vines” not so much as “illnesses” (a medical concept), but more in terms of the unique adverse experiences of each person - the “slings and arrows of outrageous fortune” – in other words life events. These may be better understood using ideas from the dynamic (rather than the bio-medical) tradition in psychiatry. The roots of this tradition are very old, but became assimilated (to some extent) within professional psychiatry a little over 100 years ago.

Let me say a bit about some of those creepers and vines which need to be separated from the main trunk or trunks.

At the time when Freud was a rising force in Vienna, in France, Pierre Janet was defining, based on detailed study of a small number of cases, what became known as multiple personality disorder – or in DSM-IV – Dissociative Identity Disorder. When the term schizophrenia gained currency 100 years ago, the Multiple Personality diagnosis rapidly fell out of fashion. Many people thought it was the same as schizophrenia, perhaps because the year after Bleuler published his book, the first movie version of Robert Louis Stevenson’s Dr Jekyll and Mr Hyde hit the cinema screens. Nowadays the Multiple Personality or Dissociative Identity diagnosis is very controversial. For myself, I tend to take it seriously, not because I have the clinical experience to form a valid opinion, but because, as a brain

theoretician, I have an idea of what might be its basis in terms of brain function. There is substantial evidence that some of the symptom groups formerly thought to be hallmarks of schizophrenia – those defined by Kurt Schneider – are actually much more common in people who get the diagnosis of Dissociative Identity Disorder. I gave a talk on this at last year's meeting, and a more extended talk in the Psychology Department of this university last December. So, that's one of the vines.

Another is the set of conditions which Freud made his name studying - conversion disorders or conversion hysteria – for him, anxiety which found its expression either as complaints of physical symptoms or as actually present physical signs. I want to connect this to that book of Ernst Kretschmer, and also to a set of symptoms said to be part of schizophrenia – the catatonic symptoms – which I could never fit into the theories I was developing. They are probably a mixture of a variety of things with diverse causes; but on reading Kretschmer's book I began to see how some of them at least might be part of the conversion hysteria/shell-shock complex of conditions; and I have some ideas of what might be *their* basis in terms of brain function. So, there is another creeper surrounding the main trunk. I am at present working on a book to try to formulate proper theories, integrating both the psychology and the biology, of both dissociative disorders and conversion syndromes.

Before I finish I should mention two other conditions, which either get confused with, or have some similarity to the core of schizophrenia. Tourette's syndrome is a precisely-definable neurological disorder, which bears strong similarities to at least some cases receiving the diagnosis of OCD (Obsessive Compulsive Disorder). These two are often confused with schizophrenia, but I suspect are very different. The other condition I want to mention is dyslexia – and this may surprise you. Three years ago at our meeting in Dunedin, I spoke about this. The point is that the overall psychological profile in dyslexia – all the enduring psychological traits - has many things in common with the non-psychotic traits in schizophrenia, with two exceptions. In schizophrenia, of course there is a vulnerability to episodes of psychosis, not seen in dyslexia; and in dyslexia there are all the visual problems and perceptual distortions, which may make reading difficult – and this is not seen in schizophrenia. What this meant to me was that, at the level of actual nerve cells, they might be very similar disorders; but, in schizophrenia, it is the anterior parts of the hemispheres – frontal and temporal lobes – which are mainly affected (and which tend to exert control over midbrain dopamine neurones which are probably important in generating states of active psychosis); while in dyslexia it is posterior

regions of the hemispheres which are primarily affected, which of course include the visual regions of the cerebral cortex.

Let me now go on to broader issues of diagnosis. At last year's meeting of NZSRG I gave a lecture which included this Maxim for validating scientific concepts quite generally.

The *only* way in which scientific concepts can be securely validated is when they are defined in ways which support strong explanatory arguments. This is *exceedingly* difficult, because explanation depends on the way concepts are defined, but one doesn't know how to define terms until the explanation is in mind.

So, by that maxim, in the end, definition of concepts does not depend just on conventions, consensus and tradition as in psychiatry, nor on all those statistically correlations for the various types of concept validity known to psychologists. In the end it must depend on proper scientific reasoning. A line from Francis Bacon (from *Novum Organum* – the “New Instrument” – published in 1620) captures the essence of the argument here:

“If the notions themselves (which is the root of the matter), are confused, and over-hastily abstracted from the facts, there can be no firmness in the supra-structure”.

In such terms, one of the deepest objectives of NZSRG would be to search for greater conceptual clarity, so that the notions (both the “tree trunk” and the various “vines”) are no longer “confused and over-hastily abstracted from the facts.” The “firmer supra-structure” to which this might lead may help diagnoses serve their practical purposes better.

Let me comment on that decision by NIMH: Perhaps it was more of a political than a scientific move. Do they really know what they are saying in scientific terms, when the scientific establishment has not got a correct balance between experiment and theory (again, that's my own view)? About the lines from the British Psychological Society: Are our concepts precise enough to say exactly what the relationship is between trauma or abuse and what is called schizophrenia. Possibly NIMH was wiser than they seem: Perhaps it was a deliberate move to create chaos, in the knowledge that times of chaos force rethinking on fundamental issues. It is time for that, not just on the details of specific diagnoses, but on the very

concept of mental illness. As I said when talking about Kretschmer, that is now very much on the agenda.

The shift is from a model of mental disorder based on the medical concept of illness, to a more holistic one. You can find such ideas in writings of Carl Gustav Jung, Kretschmer, Chinese medicine, and traditional medicine in many cultures, including the polynesian/Maori traditions. From these perspectives, health is essentially about that unending, never fully-realised quest for personal wholeness, not about dysfunction in specific systems of the body. It is not in principle anti-biological, although many people see it that way. The reason they adopt that view is that it is very difficult to actually assimilate the biological and psychological/social and spiritual sides of human nature, in detail into a coherent package; and a lot of brain biology is, I have to say, profoundly, and sometimes, I feel, offensively, anti-holistic. It has completely lost touch with the concept of an integrated person. Of course re-definition of mental disorder as “loss of sense of personal wholeness” is using a non-medical concept, although, I would argue, not an anti-scientific one. Health defined as personal wholeness is not the *opposite* of illness defined as dysfunction in a specific system. It is almost *completely independent* of it. It is possible to be on death’s door, as far as medical illness goes, and yet to be in a state of robust and near-perfect health in the holistic sense - and I have known this in one person I knew in his last days, a few years ago. Where this leaves the profession of psychiatry, and bodies like the Royal College of Psychiatrists, I am not quite sure; but I feel they too must make major shifts to ride the tidal wave that is sweeping towards us all.