Jung’s views on causes and treatments of schizophrenia in light of current trends in cognitive neuroscience and psychotherapy research II: Psychological research and treatment

Steven M. Silverstein, Rutgers, The State University of New Jersey, USA

Abstract: Jung was the first to emphasize the importance of psychological factors in the aetiology and treatment of schizophrenia. Despite this, and other seminal contributions, his work on schizophrenia is almost completely ignored or forgotten today. This paper, a follow-up to one on Jung’s theories of aetiology and symptom formation in schizophrenia (Journal of Analytical Psychology, 59, 1) reviews Jung’s views on psychological approaches to research on, and treatment of, the disorder. Five themes are covered: 1) experimental psychopathology; 2) attentional disturbance; 3) psychological treatment; 4) the relationship between the environment (including the psychiatric hospital) and symptom expression; and 5) heterogeneity and the schizophrenia spectrum. Review of these areas reveal that Jung’s ideas about the kind of research that can elucidate psychological mechanisms in schizophrenia, and the importance of psychotherapy for people with this condition, are very much in line with contemporary paradigms. Moreover, further exploration of several points of convergence could lead to advances in both of these fields, as well as within analytical psychology.

Key words: attention, environment, heterogeneity, psychotherapy, schizophrenia, symptoms

A personality, a life history, a pattern of hopes and desires lie behind the psychosis. The fault is ours if we do not understand them.

(Jung 1961/1989, p. 127)

Introduction

In Jung’s 1907 book, The Psychology of Dementia Praecox, he noted, through clinical and research data, what the symptoms of schizophrenia can reveal about unconscious and symbolic processes (Taylor 1998). In addition, he
commented how, as a guide to treatment, ‘the patient describes for us, in her symptoms, the hopes and disappointments of her life’ (Jung, 1907/1960, para. 298). This book has therefore been viewed as the first psychodynamic conceptualization of schizophrenia (Rodriguez 2003). Jung’s positions were radical for their time, a period in psychiatry when psychotic symptoms were generally seen as meaningless phenomena. The purpose of this paper is to review Jung’s views on psychological approaches to studying and treating schizophrenia, and to assess the validity of his ideas, and the usefulness of his approaches, in the light of current knowledge and paradigms in psychopathology and psychotherapy research. The review is divided into 5 sections: 1) experimental psychopathology; 2) attentional disturbance; 3) psychological treatment; 4) the relationship between the environment (including the psychiatric hospital) and symptom expression; and 5) heterogeneity and the schizophrenia spectrum. A review of the above areas reveals that Jung anticipated many aspects of the contemporary (re-)discovery of psychotherapy for schizophrenia, and provided a seminal example of how a deep understanding of schizophrenia-related mental processes can be elucidated via experimental psychological research.

**Jung’s views on psychological approaches to schizophrenia**

*Experimental psychopathology*

Although experimental studies of schizophrenia are commonplace today, they were rare in the first decade of the 20th century. Jung can thus be seen as a pioneer in this approach. His studies of word association and reaction time (RT), published starting in 1904 (see CW volume 2), were recognized in the German literature as significant for their demonstration of the meaningfulness of psychotic speech. So much so in fact that in 1905 Adolf Meyer reported on these findings in the American journal *Psychological Bulletin*, where he noted that this work was the best single contribution to the study of psychopathology during the past year (Taylor 1998). Jung’s work was held in high regard largely because, in contrast to the RT work of others, he focused not only on the amount of time it took patients with schizophrenia to respond, but also on

---

1. Freud (1896) briefly described psychoanalytic conceptualizations of paranoia and hallucinations within the context of a case study of a patient who appears to meet modern diagnostic criteria for schizophrenia. However, with a few exceptions Freud did not pursue this line of thought, presumably owing to his admitted lack of access to psychotic patients.

2. However, Meyer rejected Jung’s toxin theory of schizophrenia [see Silverstein (2014) for an evaluation of it in terms of current evidence]. In 1909, at the Clark University meeting at which Freud and Jung were in attendance, Meyer spoke against seeking the aetiology of schizophrenia in ‘artificial explanations by specially invented poisons’ (Leif 1948, p. 249), and rejected the existence of ‘toxins’ as causal in the disorder, while at the same time praising the psychodynamic views of Jung and Freud regarding the disorders they were writing about (Meyer 1910; Leif 1948). After an earlier (1908) visit with Meyer, Jung wrote to Freud that Meyer is ‘entirely on our side in spite of the toxin problem in dementia praecox’ (McGuire 1974, p. 170).
the personal meaning of their responses and whether they could recall them on later trials (Moskowitz 2006). This is consistent with the influence of Freud on Jung, and therefore, Jung can be seen as perhaps the first to conduct empirical investigations into Freud’s theories, an endeavour that did not become common until the 1980s. Importantly, Jung recognized that long RT is not characteristic of all patients with schizophrenia (Peterson & Jung 1907/1981, para. 1176). This appreciation of individual differences foreshadowed the current focus on heterogeneity and subtypes within schizophrenia, including the recognition that no impairment can be found in all patients, as currently diagnosed (Heinrichs 2001; also the final section of this paper).

The methods Jung employed in his research were both sophisticated and novel (in terms of their application to schizophrenia), and the manner in which he incorporated technology into his studies foreshadowed the development of various disciplines within psychology. For example, Jung’s use of the ‘psychograph’ or psycho-galvanometer (to measure what we today call electrodermal activity) was a clear precedent for today’s field of cognitive psychophysiology, where combining electrophysiological and behavioral measurement is routine. In particular, his work anticipated recent studies that use functional magnetic resonance imaging (fMRI) and event-related potential methods to probe the brain mechanisms involved in formal thought disorder (e.g., Hokama et al. 2003; Kuperberg et al. 2006; Ragland et al. 2005; Spitzer 1993). In general, Jung’s work on word association in schizophrenia can be seen as anticipating modern day semantic network studies of schizophrenia (e.g., Kreher et al. 2009; Kuperberg et al. 2006), in the sense that this new field assumes that the often odd verbal associations of schizophrenia patients can be understood psychologically.

Perhaps the most important contribution of Jung’s experimental studies was his demonstration that through the use of psychological methods, one can develop insights into the personal issues around which complexes are formed, and which are the basis for psychotic and other psychiatric symptoms. In general, he believed that the factor that accounted for disturbances in association in schizophrenia was the complex—both by generating affective responses to specific words and ideas (typically leading to longer RTs), and by involuntarily drawing attention to itself, which leads to reduced semantic processing of words, and therefore to an increase in superficial, concrete, and out-of-context associations. This view has received support from later research demonstrating that: 1) formal thought disorder during proverb interpretation is related to perceived level of psychological threat (Carson 1962); 2) abnormal proverb interpretation in people with schizophrenia often involves inclusion material from patients’ past or current experience (Harrow and Prosen, 1978, 1979); 3) proverb interpretations are more concrete in schizophrenia when instructions stress personalized involvement compared to when they do not, whereas this effect was not found in other psychiatric or neurologic patients (Nahor and Vannicelli, 1976); and 4) intense stress leads to increased stimulation of dopamine receptors in the prefrontal cortex and subsequent disconnection in
prefrontal networks, and this has been proposed to be a mechanism involved in thought disorder in schizophrenia (Hains and Arnsten, 2008).

**Attention**

Jung emphasized reductions of attention in schizophrenia, and this is consistent with an enormous amount of empirical research (Reichenberg 2010). As did Masselon (1902), Jung noted that poor attention has a number of clinically significant consequences. These include reductions in: the quality of perception of external objects; awareness of one’s personality; judgment; and feelings of rapport, belief, and certainty regarding people and objects in the world. He also believed that attentional impairment was related to the affective and motivational disturbances found in people with schizophrenia. For example, Jung stated that ‘objects do not excite in the diseased brain the affective reaction which alone permits the adequate selection of intellectual associations’ (Peterson & Jung 1907/1981, para. 1067). Here, Jung was clearly influenced by his hospital chief Bleuler, who had earlier written that ‘attention is nothing more than a special form of affectivity’ (Bleuler 1906, p. 31). These observations are consistent with recent research on the link between motivation, effort, and attention in people with schizophrenia (Gorissen et al. 2005; Granholm et al. 2007; Silverstein, 2010). The reader may note here that the reduction in consciously available attentional resources that Jung discusses resembles the abaissement duniveauementale discussed throughout the Psychology of Dementia Praecox. In a late paper, Jung clarified that he believed these to be related: ‘the abaissement, whatever its cause, begins with a relaxation of concentration or attention’ (Jung 1957/1960, para. 544).

An important contribution by Jung regarding the cause of reduced attention involved his theoretical construct of the complex. In Jung’s view, the ego is normally the strongest complex, and has the strongest attention-tone. However, in schizophrenia, a new complex or new complexes emerge and attract more attention than the ego complex, as noted above. When the ego complex becomes just one of several background complexes, its ability to excite or inhibit associations (seen as general functions of attention), or to direct the contents of consciousness, is significantly reduced. He noted, however, that these alterations in attention only occur when the new complex is activated. Specifically: ‘When the complex is hit, conscious association is disturbed and becomes superficial, owing to the flowing off of attention to the underlying complex (“inhibition of attention”’) (Jung 1907/1960, para. 135). Furthermore, ‘What disturbs the patients’ concentration is the autonomous complex, which paralyses all other psychic activities’ (ibid., para. 162). Jung then added: ‘curiously enough, this fact escaped Janet’ (ibid.).

---

3 Jung claimed, however, that interference from complexes is continual in schizophrenia, ‘which is seldom seen in normal people or even in hysterics’ (1907/1960, para. 208).
Jung hypothesized that the reduced attentional resources available to the ego complex could account for some aspects of psychosis. For example, in his RT studies, he observed that, in healthy people, when attention is distracted there is an increase in superficial associations (e.g., clang associations) and perseverations, and a decrease in meaningful combinations. This suggests that these phenomena, when they occur in psychotic patients, are due to an intrinsic factor (the complex) that is draining attentional resources from the ego. Elsewhere, he noted that ‘[t]he state of reduced attention expresses itself in the decreased clarity of ideas. When ideas are unclear, their differences are unclear too’ (ibid., para. 134). Jung also described how the emotionally excited state can prevent a person from paying attention to his/her own associations, which can lead to further thought disturbances. The hypothesis that formal thought disorder in schizophrenia is related to attentional disturbance is supported by current research (Docherty, 2012), and attentional impairment has also been found to be a factor in the source monitoring failures of schizophrenia, which have been hypothesized to be a setting condition for hallucinations (e.g., Shakeel & Docherty 2012). Jung also seems to have anticipated recent cognitive psychological work on attention in general, which posits that its function is to facilitate deeper (e.g., semantic) processing of attended-to perceptions and mental representations, and to inhibit processing of other stimuli (Fuster 2003; Pratte et al. 2013, in press).

Psychological treatment of schizophrenia

Jung was among the first psychiatrists to use psychotherapy as a treatment for schizophrenia (Jaffé 1972; McGuire 1960). Although Jung sometimes doubted whether psychotherapy could be of more than limited benefit for some patients with schizophrenia (1957/1960, para. 549), throughout his career he maintained that in most cases, ‘schizophrenic disturbances could be treated and cured by psychological means’ (1958a/1960, para. 559). Jung’s position that people with schizophrenia could be helped, or even cured, with psychotherapy ran counter to the attitude that prevailed in psychiatry throughout the 20th century and that is still prominent today among many leading psychiatrists (e.g., Fuller Torry, 2006), despite several notable contributions from psychoanalytic pioneers during the 20th century (Bachmann et al. 2003).

Recently though, there has been a resurgence of effort dedicated towards developing effective psychotherapies for schizophrenia (Hamm et al. 2013; Lysaker et al. 2010; Lysaker and Silverstein, 2009; Silverstein and Lysaker, 2009), and this has taken several forms. One involves continued modification of psychoanalytic treatments for people with the disorder (Havens, 2000; Silver et al. 2003; Silverstein et al. 2006a, 2006b), including development of psychodynamically oriented supportive psychotherapy (Kates and Rockland, 1994). Perhaps the largest body of work has been on forms of cognitive behavioral therapy (CBT) that target delusions
and hallucinations, as well as the core beliefs associated with the anxiety and depression that often trigger the emergence of psychotic symptoms. Much evidence now indicates the effectiveness of CBT for reducing the frequency and severity of psychotic symptoms and improving quality of life (Rector & Beck, 2012; Tarrier, 2010). Moreover, traditional CBT approaches are being modified to focus on more traditional psychodynamic issues such as the self (Chadwick, 2006), and the integration of analytic (including Jungian) perspectives and techniques (e.g., archetypal amplification) has been demonstrated to complement CBT approaches (e.g., Silverstein, 2007). In addition, CBT for psychosis has recently been modified for use with patients with poor insight into their condition (Perivoliotis et al. 2009), or with intense social anxiety (Smith & Yanos, 2009). Other studies have demonstrated that CBT can be effective with patients whose symptoms are refractory to medication (Barretto et al. 2009; Turkington et al. 2008). Beyond psychotherapy, data indicate that first episode psychosis can be treated successfully using a team approach involving intensive individual and family therapy delivered in the home (Lehtinen et al. 2000), often with minimal medication use. There is also a huge amount of evidence indicating that a variety of group and family treatments designed to improve social and other living skills can be effective (reviewed in Silverstein et al. 2006a, 2006b).

Earlier, it was noted that Jung claimed ‘the patient describes for us, in her symptoms, the hopes and disappointments of her life’ (Jung 1907/1960, para. 298). This position has been borne out by recent research demonstrating that the nature and content of psychotic symptoms such as hallucinations and delusions can be accounted for by a pathway involving adverse experiences (e.g., trauma) and the attributional biases that develop in their aftermath (Bentall & Fernyhough, 2009; see also Greek, 2010 for a first-hand account of the personal meaning of hallucinations). However, Jung believed that understanding the origin of psychotic symptoms was only the first half of the therapist’s task. In his view, the second half involves their constructive comprehension; in other words ‘What is the goal the patient tried to reach through his creation?’ (Jung 1915, p. 393). As it was in Jung’s lifetime, this prospective approach is still largely un-used in psychotherapy with schizophrenia patients today.

Although Jung believed that schizophrenia could be treated with psychotherapy, he also recognized that under certain conditions, forms of psychotherapy could lead to symptom exacerbation—a warning that continues to ring true (Drake & Sederer, 1986; Silverstein et al. 2006a, 2006b). For example, he noted that when dealing with patients with ‘isolation symptoms’ (e.g., dreams of cosmic catastrophes or the end of the world, perceptions of walls bending and bulging, beliefs that relatives are dead, etc., which he viewed as manifestations of the disintegration of psychic structures), this calls for ‘immediate precautions, such as discontinuation of treatment, careful re-establishment of personal rapport, change of milieu, choice of another therapist, strict avoidance of any concern with the contents of the unconscious and especially with dream analysis, and so on’ (1958a/1960, para. 560).
One of the most interesting aspects of Jung’s writings on schizophrenia treatment is the extent to which his views on the continuity of normal, neurotic and psychotic experience are similar to those currently being espoused by groups developing CBT for psychosis (e.g., Bentall, 1999; Chadwick et al. 1999). Jung’s view that psychotic symptoms could be seen on a continuum with normal ideation stood in sharp contrast to the influential view of Jaspers (1913/1997) who saw, for example, delusions, as unrelated to normal thought processes and of indiscernible origin. In cognitive models upon which CBT for psychosis is based, a phenomenon like hallucinations can be seen as an extreme example of imagery, and a delusion can be seen as a thought that is ascribed to without question, much in the same way that people rigidly hold to religious and political views. In CBT with people with schizophrenia, symptoms are ‘normalized’ or de-pathologized by explaining to the patient how they can be understood as extremes of normal functioning (caused by stress or various endogenous factors), and this provides a non-threatening rationale for therapeutic interventions to reduce the intensity of the symptom. For example, a delusional idea might be explained as an example of a non-questioning attitude being applied to the symptomatic idea, and this sets the stage for cognitive exercises and behavioral experiments to test the validity of the idea, and ultimately to replace it with ideas grounded in new experiences of reality.

Jung described many ways in which psychotic symptoms can be seen as extremes of normal functioning. For example, regarding hallucinations, he noted that dementia praecox ‘merely sets in motion a preformed mechanism which normally functions in dreams’ (1907/1960, para. 180). Regarding formal thought disorder, Jung believed it could be accounted for by reductions in attention to one’s own thoughts, a view with obvious therapeutic implications, in terms of cognitive remediation. Many other examples of normalization exist as well. For example, he noted that the effects of a complex (e.g., heightened emotional reactivity to complex-related stimuli) can be found in normal people, and that, in his research, he found that blocking and amnesia, as found during association tests in people with schizophrenia, are also found in normal people (1907/1960, para. 16). Similarly, what Jung called ‘fascination’—the behaviour, in schizophrenia, of drawing attention away from the stimulus word or environment when a complex is activated—is similar, in everyday life, to normal people breaking off an unpleasant conversation by suddenly starting to speak about something else. He noted, therefore, that ‘fascination’ is ‘on a level with normal mechanisms’ (1907/1960, para. 178). Jung also believed that the use of neologisms by people with schizophrenia was but an extreme example of what could be observed in healthy people, and people with hysteria, where linguistically odd reactions, or use of foreign words occurs when complexes are activated. Related to this, he noted that in healthy people, ‘Quotation is a favourite way of expressing complexes’ (1907/1960, para. 244). Regarding delusions or statements of grandeur, Jung noted that the often bizarre statements of psychotic patients can be understood as efforts to preserve self-esteem. Specifically,
he saw such statements as ‘I am triple owner of the world’ (1907/1960, para. 232), and ‘I am the finest professorship...I am Double Polytechnic irreplaceable’ (1907/1960, para. 219), as examples of wish-fulfillment, compensating for a damaged sense of self. Jung compared comments such as these to ‘the pompous style of officials or half-educated journalists’ (1907/1960, para. 269) who often also use language as a manifestation of a striving for prestige. This hypothesis is consistent with modern research and theory on an altered and damaged sense of self in schizophrenia (Lysaker and Lysaker, 2008; Moe & Docherty, 2013). Finally, regarding the idea that complexes can gain in strength and detract from ego function, Jung noted that this is similar to what happens when one is in love. When this occurs, a person’s attention is attuned to anything having to do with the beloved, items are collected, ideas not related to the person’s greatness are ignored, affect is heightened, and most thought is directed to the relationship. Despite the many ways in which Jung’s views provide strategies for a normalizing rationale for multiple psychotic symptoms, use of these perspectives within a psychotherapy context has not been reported.

The implications of many of Jung’s observations on the psychological basis of psychotic symptoms are consistent with recent development in the treatment of schizophrenia. For example, his observation that many of the bizarre and grandiose statements of patients are wish-fulfillments that compensate for a damaged sense of self anticipated modern psychotherapeutic efforts to strengthen the sense of self in schizophrenia (Chadwick, 2006) and to reduce internalized stigma and enhance personal narratives (Yanos, et al. 2012). Jung also noted that ‘[i]n a case where the symbolism is so richly developed, the sexual complex cannot be lacking’ (1907/1960, para. 276), and he compared the grandiose delusional statements of a female patient to ‘unmistakable affectation such as is often found in elderly spinsters who try to create a substitute for unsatisfied sexuality by the greatest possible perfection of demeanour’ (1907/1960, para. 201). To be sure, in routine clinical practice, sexual issues are ignored in the treatment of schizophrenia patients with the notable exception of the recent development of the 2-part UCLA Friendship and Intimacy Module, which is a manualized treatment focusing on dating skills, sexual behaviour, birth control methods and sexually transmitted diseases (see Kopelowicz et al. 2011). Jung also would recommend books or essays for his patients to read (see 1958a/1960, paras. 561 and 574 for two examples), a practice currently known as bibliotherapy, and that has been applied to a wide range of psychiatric conditions, including schizophrenia (e.g., Elser 1982). He also frequently recommended art therapy for his patients (1958a/1960, para. 562), which is now widely practiced. In addition, Jung

---

4 Jung’s discussions of sexuality in schizophrenia are rare, and do not occur after his earliest writings on the disorder. It is possible that they reflected his consideration of Freud’s desire for him to extend libido theory to an understanding of schizophrenia (see Freud’s 1908 letter to Jung in McGuire 1974, p. 168; B. Silverstein 1985, 2003), although Jung was openly resistant to accepting this mission, even as early as 1907 (see his Foreword to The Psychology of Dementia Praecox).
(1958a/1960) delivered what may be the first example of cognitive remediation for schizophrenia (Silverstein, 2000). Specifically, a female patient told him that her hallucinated voice (which she interpreted as God’s) said she should tell Jung to read her a chapter of the Bible at each session, and then she would memorize it at home. Jung followed these instructions, and reported that

the exercise not only helped the patient’s speech and powers of expression but also brought about a noticeable improvement in the psychic rapport. The end result was that about after eight years the right side of her body was free of voices.

(1958a/1960, para. 574)

Jung understood the therapeutic effects of this intervention as being due ‘to the fact that her attention and interest were kept alive’ (ibid., para. 574). In addition to demonstrating the beneficial effects of targeting cognitive processes directly for treatment, a now well established method for schizophrenia with demonstrated effectiveness (Medalia and Choi, 2009), this clinical vignette has all the hallmarks of what is today called recovery-oriented treatment, in the sense that the task was personalized and therefore meaningful to the patient. These factors have been demonstrated to be important to treatment success (Medalia et al. 2002), but are still too rarely present in treatment today.

Beyond the importance of specific interventions, Jung recognized that the non-specific factors in therapy, primarily the personal relationship between patient and therapist, were the critical factor in treatment response. For example, he noted that

It would be a mistake to suppose that more or less suitable methods of treatment exist… The thing that really matters is the personal commitment, the serious purpose, the devotion, indeed the self-sacrifice, of those who give the treatment. I have seen results that were truly miraculous, as when sympathetic nurses and laymen were able, by their courage and steady devotion, to re-establish psychic rapport with their patients and so achieve quite astounding cures.

(1958a/1960, para. 573)

This view is supported by data from several countries on the Soteria approach to treating young people with schizophrenia—where treatment is largely provided by laypeople in a non-stigmatizing, home-like, accepting environment where the focus is on exploring the phenomenology of the patient, often with minimal or no use of medication (Bola & Mosher 2003; Calton et al. 2008). It is also consistent with much psychotherapy research in general that demonstrates that the therapist’s qualities of warmth, empathy, and genuineness (i.e., ‘non-specific factors’) are more important than the theoretical orientation of the therapist (Patterson 1984), and that relationship building in the treatment of psychotic patients is critical (Jackson et al. 2008).

Regarding the therapist, Jung commented that ‘one can bring about noticeable improvements in severe schizophrenics, and even cure them, by psychological treatment, provided that “one’s own constitution holds out”’ (1907/1960, para. 573). The latter
point anticipated later research on therapist personality characteristics associated with successful psychotherapy of people with schizophrenia (Cancro 1983; Frosch et al. 1983; Whitehorn and Betz, 1960).

In short, keeping in mind that whether schizophrenia can be cured by any means remains a controversial issue, and that, given changes in diagnostic practice, a portion of the people diagnosed with schizophrenia that were treated (and possibly ‘cured’) by Jung would not meet modern criteria for the disorder, Jung’s position on the effectiveness of treatment delivered by committed therapists and other staff members has received empirical support from several sources.

The relationship between the environment (including psychiatric hospital wards), and the expression of symptoms

Jung was one of the first clinicians to recognize that the patient’s environment had a significant impact on symptom expression and overall functioning—a view that has been confirmed by numerous lines of research over the last century, including the large body of evidence on family therapy reducing relapse rates in patients living with (initially) hostile and critical families (Goldstein 1995; Pharoah et al. 2010). For example, in 1939, Jung noted the ‘enormous change’ that has taken place in the average mental hospital in his lifetime. Specifically, ‘That whole desperate crowd of utterly degenerate catatonics has practically disappeared, simply because they have been given something to do’ (1939/1960, para. 539). This observation is supported by studies demonstrating that the level of negative (i.e., deficit) symptoms observed in hospitalized patients is inversely related to the amount of positive stimulation on the ward (Oshima et al. 2003, 2005; Wing & Brown 1970), and that the level of expression of psychotic symptoms is related to the degree to which discriminative stimuli on an inpatient unit suggest a medical as opposed to a social environment (Zarlock, 1966). Jung also commented: ‘The results of occupational therapy in mental hospitals have clearly shown that the status of hopeless cases can be enormously improved’ (1939/1960, para. 540). This is consistent with much research demonstrating that long-stay hospital patients can demonstrate significant improvements in the context of evidence-based behavioural treatment (e.g., Paul & Lentz, 1977; Silverstein et al. 2006a, 2006b; Corrigan & Liberman 1994). However, he also noted that, in many cases, no improvement, or minimal improvement occurs, a situation that continues to be true today, despite the availability of evidence-based practices (which are rarely used) for ‘treatment-refractory’ patients (Silverstein et al. 2013a, 2013b; Silverstein & Bellack, 2008; Insel, 2010).

Jung believed that much treatment failure was due to the negative interpersonal milieus in which hospitalized patients lived. For example, when, referring to a formerly high functioning patient who was preoccupied with physical symptoms, he noted that
she suffers under the discipline imposed by the doctors, and under the treatment she
receives from the ward-personnel, she is not recognized, and she does not get her deserts
despite the fact that she has achieved the best of everything. The complex of death
expectation is of great significance in determining some of the stereotypies...

(1907/1960, p. 133, para. 276).

Today, it is recognized that the quality of staff-patient interaction is critical to treatment
outcomes, and that negative staff behaviours towards patients (e.g., criticism, neglect)
can lead to poor treatment outcomes (Berry et al. 2000). Consistent with the idea of
a normalizing rationale noted in the section above, Jung also noted about this patient
that ‘[a]ny person with a lively sense of his own worth, who for any reason was forced
into such a hopeless and morally destructive situation, would probably dream in a
similar way’ (1907/1960, para. 276).

Contrary to many of his peers, Jung maintained that the emergence of strong
affect in a given situation can be gainfully understood when interpreted within the
context of the patient’s past and recent history. This is similar to his observation that
the content of psychotic symptoms can be understood as reflecting the person’s
history, as noted in the section above. Although Jung believed there was often a
disconnection between affective and cognitive functions in schizophrenia, he
cautioned that ‘We see them far too little, a fact which every psychiatrist will confirm.
It is therefore possible that their excitaments often remain incomprehensible to us
only because we do not see their associative causes’ (1907/1960, para. 35). Therefore, he noted ‘one may, by careful analysis, sometimes find the psychological
clue that leads to the cause of the excitement...we have absolutely no reason to
suppose that no sufficient connection exists’ (1907/1960, para. 149). This
framework for investigating the antecedents and (sustaining) consequences of
abnormal behaviours is exactly the rationale for functional assessment as it is
practiced today as the basis for designing behavioural interventions for chronically
psychotic patients (Hunter et al. 2008). Jung also made the point that even healthy
people do not always understand the causes of their own reactions, so we can be
expected to understand even less the reactions of people we do not see very often.
This again stresses parallels in psychological functioning between neurotic and
psychotic states, and provides a rationale for psychotherapeutic intervention.

Heterogeneity and the schizophrenia spectrum

Although schizophrenia is often discussed as if it is a single disease, it is in fact a
heterogeneous set of syndromes, such as epilepsy or cancer (Carpenter 2013;
Silverstein et al. 2013a, 2013b; Williams & Gott, 2013, in press). This was noted
by Jung in 1906 when he wrote: ‘Dementia praecox...denotes a group of illnesses
which have not yet been clearly defined clinically’ (1906/1981, footnote 22). Currently, the etiologies of the syndromes within the category of schizophrenia,
or even how many there are, remain largely unknown, and are the foci of much
active research. Many typologies have been proposed over the years, and most have been found to lack validity. In an early attempt at typology, Jung posited ‘the existence of two groups of schizophrenia: one with a weak consciousness and the other with a strong unconscious’ (Jung 1939/1960, para. 531). To date, this hypothesis has not been tested. However, another of Jung’s hypotheses has received support. In 1958, Jung estimated that the ratio of cases of latent or potential schizophrenia to diagnosable cases was 10:1 (Jung 1958a/1960, para. 558). Remarkably, this was the same base rate for schizotypy estimated by Meehl (1962), who pioneered modern research on subsyndromal forms of schizophrenia. Moreover, much later research using varying subject samples, different scales of schizotypic experiences and symptoms, different cultures, and different statistical procedures, has also estimated the schizotypy taxon to have a base rate of approximately 10% (reviewed in Fossati & Lenzenweger 2009), whereas the rate of schizophrenia has consistently been estimated at ~1% (Perälä et al. 2007), all supporting Jung’s claims based on his clinical experience.

In the epilogue to The Psychology of Dementia Praecox (para. 315), Jung noted that his case material was mainly from paranoid patients, and therefore it is unclear how much his theories applied to cases of catatonia or hebephrenia. Elsewhere, he claimed that his material consisted of ‘milder, still fluid cases’ (Jung 1958a/1960, para. 577), and therefore that there may be more severe forms of the disorder ‘for which a psychogenic aetiology can be considered only in minimal degree or perhaps not at all’ (1958a/1960, para. 577). This again suggests a fundamental heterogeneity in aetiology, especially regarding the relative contributions of a neurodevelopmental process versus a trauma- or stress-induced syndrome, and this issue is still being debated today (e.g., Morgan et al. 2013), although it is now recognized that environmental effects operate by altering brain and other biological functions.

Conclusions

Jung was a pioneer: the manner in which he approached understanding, treating, and studying schizophrenia was decades ahead of his time. That his work is largely ignored within the psychoanalytic tradition, and by schizophrenia researchers, is astounding. Outside of Jung scholars, Jung’s roles in developing the modern concept of schizophrenia, and in setting a standard for its psychological understanding and treatment (Shamdasani 2003) are largely forgotten. However, a number of his concepts [e.g., the weakening of excitatory and inhibitory functions in cognition; the existence, nature, and

5 Near the end of his life, Jung (1961/1989) recognized that his work in schizophrenia was largely ignored when he noted that: ‘It was always astounding to me that psychiatry should have taken so long to look into the content of the psychoses’ (p. 127); ‘It seems equally odd to me that my investigations of that time are almost forgotten today (ibid.) and ‘Already at the beginning of the century I treated schizophrenia psychotherapeutically’ (ibid.).
aetiology of complexes; the emergence and role of archetypal constellation in psychotic episodes; the hypothesis of a predisposition for intense affect, and its effects on brain function in schizophrenia; the potential for a toxic aetiology of schizophrenia; the continuum of normal and psychotic phenomena; the meaningfulness of psychotic speech; the role of the therapeutic relationship and psychotherapy for helping people with schizophrenia; the role of the environment in symptom expression; heterogeneity within the schizophrenia spectrum, etc. (see above and Silverstein 2014) are relevant to current work in cognitive neuroscience and treatment development. Concerning psychotherapy, Jung’s views that schizophrenia may have a psychological basis, that symptom expression is at least partly a function of psychological and environmental determinants, and that this behooves clinicians to develop relationships with patients and to use the nature and content of symptoms as a guide to treatment may not seem revolutionary today. However, it is important to recognize how radical these ideas were in their time, how they anticipated clinical approaches to schizophrenia over the past 100 years, and how similar they are to contemporary views of the disorder. Despite this, psychological treatments for schizophrenia are still underutilized (Silverstein et al. 2006a, 2006b), and few Jungian analysts have advanced the field of psychotherapy for schizophrenia (Couteau 1988). Concerning research, in Jung’s time, experimental psychological studies of schizophrenia were rare. Now, work similar to Jung’s, which focuses on connecting psychological constructs to their biological bases, is commonplace.

The main theme in Jung’s writings on schizophrenia is that it can and should be understood at both the psychological and biological levels. However, only recently have we begun to truly appreciate and embrace biopsychosocial models of the disorder, and to appreciate the treatment implications of doing so. For

6 Jung (1958b) wrote: ‘I consider the aetiology of schizophrenia to be a dual one: namely, up to a certain point psychology is indispensable in explaining the nature and the causes of the initial emotions which give rise to metabolic alterations. These emotions seem to be accompanied by chemical processes that cause specific temporary or chronic disturbances or lesions’ (1958b, p. 194); and, schizophrenia ‘has two aspects, physiological and psychological, for the disease, so far as we can see today, does not permit of a one-sided explanation. Its symptomatology points on the one hand to an underlying destructive process, possibly of a toxic nature, and on the other—inasmuch as a psychogenic aetiology is not excluded and psychological treatment (in suitable cases) is effective—to a psychic factor of equal importance’ (1957/1960, para. 549). Given this, it is interesting to note that, despite Jung’s rejection of Freud’s wish for him to explain schizophrenia in terms of libido theory (Jung 1912/2011, p. 39), Jung nevertheless adopted a general position that was similar to Freud’s two-sided view regarding neuroses (Silverstein, 1985, 2003). That is, what may have attracted Jung to working with Freud, despite their differences over the nature of the biological basis of psychosis, was their shared view that psychopathology had both biological and psychological causes, and that these could be discovered using the science of depth psychology. Whereas for Freud, circa 1907, the determining biological factor in the neuroses was to be found in increases/decreases and misdirections of nervous system excitation from hypothesized sexual chemistry, related to disruption of normal sexual practices or to the effects of repression of material related to infantile sexual fantasies; for Jung, the organic factor in schizophrenia was not related to sexual function, but was the hypothetical toxin X (Silverstein, 2014).
example, in the current dominant paradigm, the aetiology of schizophrenia is viewed as the result of an interaction between a person’s life experience, the cognitive schemata and attributional style that are developed about self and others, the quality of the interpersonal environment, chronic stress and its effects on the brain, and genetic and other biological (e.g., inflammatory, neurocircuitry) factors that may lead to heightened stress reactions and their excitotoxic consequences (Morgan et al. 2013; Silverstein et al. 2013b). Based on this, comprehensive treatment is no longer seen as medication or psychotherapy alone, but as a combination of interventions that improve coping skills, alter the environment to reduce stress (including by educating caregivers), and, via biological and/or psychological methods, improving a person’s resilience (Kopelowicz et al. 2009; Silverstein et al. 2013a, 2013b; Silverstein et al. 2006a, 2006b).

Jung viewed *The Psychology of Dementia Praecox* as a milestone of sorts, in terms of a psychological understanding of schizophrenia, although he recognized its limitations.

I have made it very easy for my critics: my work has many weak spots and gaps, for which I crave the reader’s indulgence. All the same, the critic must be ruthless in the interests of truth. Somebody, after all, had to take it on himself to start the ball rolling.

(1907/1960, para. 316)

After more than 100 years, the ball is still rolling, and very often in the same directions. However, relegating Jung’s work on schizophrenia to the history books does a disservice to both ourselves and our patients. In contrast, increased attention to Jung’s experimental and theoretical work could lead to important research on the mind-brain interface in schizophrenia (which would benefit both cognitive neuroscience and analytical psychology), to a better understanding of self-disturbance in the disorder, and to advances in theoretical models and treatment—all of which are recognized by various stakeholder groups as important goals. Restoring Jung’s status to be on par with that of Bleuler and Krapelin would help ensure that the implications of the convergence of Jung’s ideas and modern cognitive neuroscience and psychotherapy for schizophrenia are usefully explored.

**TRANSLATIONS OF ABSTRACT**

Jung a été le premier à souligner l’importance des facteurs psychiques dans l’étiologie et le traitement de la schizophrénie. Malgré cela, ainsi que d’autres contributions fondatrices, son travail sur la schizophrénie est presque totalement ignoré ou oublié de nos jours. Cet article, qui fait suite à un autre sur les théories de Jung sur l’étiologie et la formation des symptômes dans la schizophrénie (*Journal of Analytical Psychology*, 59, 1), passe en revue les idées de Jung à propos des approches psychologiques sur la recherche et sur le traitement.
de ce trouble. Cinq thèmes seront considérés: 1) la psychopathologie expérimentale; 2) les troubles de l’attention; 3) le traitement psychologique; 4) la relation entre l’environnement (incluant l’hôpital psychiatrique) et l’expression du symptôme; et 5) l’hétérogénéité et la diversité de la schizophrénie. La revue de ces champs montre que les idées de Jung sur la manière de rechercher ce qui pourrait éclairer les mécanismes psychiques dans la schizophrénie, et sur l’importance de la psychothérapie chez ceux qui en sont atteints, vont dans le sens des paradigmes contemporains. De plus, l’exploration supplémentaire de plusieurs points de convergence pourrait conduire à des avancées dans ces deux champs, ainsi qu’en psychologie analytique.


Jung fu il primo a porre l’accento sull’importanza dei fattori psicologici per l’ezioiologia e il trattamento della schizofrenia. Nonostante ciò e nonostante altri contributi originali, oggi il suo lavoro sulla schizofrenia è quasi del tutto ignorato o dimenticato. Questo lavoro, che segue uno precedente sulle teorie di Jung riguardanti l’ezioiologia e la formazione dei sintomi nella schizofrenia (Journal of Analytical Psychology, 59, 1) riesamina gli approcci psicologici della ricerca e il trattamento di questo disturbo. Vengono considerati cinque aspetti: 1) la psicopatologia sperimentale; 2) i disturbi dell’attenzione; 3) il trattamento psicologico; 4) la relazione tra l’ambiente (incluso l’ospedale psichiatrico) e l’espressione dei sintomi; 5) l’eterogeneità e lo spectrum della schizofrenia. Una revisione di queste aree mostrano che le idee di Jung su quale tipo di ricerca può chiarire i meccanismi psicologici nella schizofrenia e sull’importanza della psicoterapia per persone in questa condizione, sono molto in linea con i paradigmi contemporanei. Inoltre una ulteriore esplorazione dei vari punti di convergenza può portare ad avanzamenti in entrambi questi campi, così come all’interno della psicologia analitica.

Юнг был первым, кто подчеркивал важность психологических факторов в этиологии лечения шизофрении. Несмотря на это и другие конструктивные идеи, его работой о
Jung fue el primero en destacar la importancia de los factores psicológicos en la etiología y el tratamiento de la esquizofrenia. A pesar de esto, y otras aportaciones fundamentales, su trabajo sobre la esquizofrenia es casi completamente ignorado u olvidado hoy día. Este documento, que da seguimiento a una de las teorías de Jung de la etiología y el síntoma formación en la esquizofrenia (Journal of Analytical Psychology, 59, 1) revisa las opiniones de Jung sobre los enfoques psicológicos en la investigación y el tratamiento de la enfermedad. Se cubren cinco temas: 1) psicopatología experimental; 2) alteraciones de la atención; 3) tratamiento psicológico; 4) la relación entre el medio ambiente, (incluido el hospital psiquiátrico) y la expresión del síntoma; y 5) heterogeneidad y el espectro de la esquizofrenia. La revisión de estos aspectos revela que las ideas de Jung sobre el tipo de investigación que puedan dilucidar los mecanismos psicológicos de la esquizofrenia, y la importancia de la psicoterapia para las personas con esta afeción, están muy en consonancia con los actuales paradigmas. Por otra parte, una mayor exploración de varios puntos de convergencia podría conducir a avances en ambos campos y en psicología analítica.

References


Silverstein, S.M., Moghaddam, B. & Wykes, T. (2013a). ‘Schizophrenia: The nature of the problems and the need for evolution and synthesis in our approaches’. In


**Acknowledgments**

I thank Barry Silverstein, George Arwood and Matthew Roché for their encouragement to write this paper, and for helpful suggestions regarding its final content and form.