# Building an Integrative Science for Psychotherapy for the 21st-Century: Preface and introduction

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Preface and introduction

We were delighted to be invited to bring together authors to contribute to this special edition of Psychology and Psychotherapy on the theme of *Building an Integrative Science for Psychotherapy for the 21st Century.* In the pages that follow different authors, from different backgrounds, address the key issues in such an endeavour, set against the challenges and controversies in our field. There are challenges relating to the fragmentation of approaches (with some estimates suggesting over 400 different schools of psychotherapy), many with their own training and career paths. There are controversies relating to fragmentation in the scientific underpinnings of models, the delineation of processes creating mental suffering, and many variations in alleviation and prevention techniques, with at times unhelpful competition between them. Some approaches focus on cognitive processes others on emotion, others on motivation, and others on behaviour. Some see targeting core physiological processes (such as neuroplasticity of the frontal cortex and heart rate variability) as central to change, others ignore them altogether. As Kazdin (2009) notes, despite considerable research and many models we are still not sure how psychotherapy works. Although some years ago Arnold Lazarus (1989) argued strongly in favour of multimodal therapies with his concept of BASIC-ID (Behaviour, Affect, Sensation, Imagery, Cognition, Interpersonal relationships and Drugs/Biological processes) as an integrative therapy, for the most part this has not been adopted. In addition, there are increasing calls for a more consilient approach that integrates knowledge across different, scientific disciplines (Wilson, 1998; Henriques, 2008; Siegel, this volume) and certainly to encourage therapists to read more widely than just from their own school of therapy. Part of the focus of this special addition is because we will continue to struggle with understanding how psychotherapy works, and developing improved interventions and preventions, without far more integrative biopsychosocial approaches than currently exist.

**The Models**

One source of fragmentation and diversity is that many schools of psychotherapy began with the observations of charismatic founders and then those who followed them developed their techniques and used science to explore the theory already formed (Kirby & Gilbert, 2017). For example, behaviour therapies, cognitive therapies, emotion-based therapies,

psychodynamic therapies all typically study mental health difficulties *through the lens of their modal*. We can highlight some of the issues of using process models as offered in Figure 1.

Insert figure 1 about here

The first stages of science begins with observations. Observations then give rise to the exploration of process; the 'what' (is it), 'how' (did it get there and work) and 'why' (does it exist) of the phenomena observed. These generate theories about the nature of the processes and an interest in the interrelationships between the variables observed. From these come hypothesis generating and hypothesis testing research. As different therapy approaches develop different theories about the processes that generate mental states and phenomena, they also generate theories about how to change them. For example, a behaviourist might observe mental states and behaviour that might be labelled depression. They then begin to observe behaviours that may be linked to depression, noting triggering and reinforcement contingencies, develop a theory about the causes and contingencies of such behaviours, and design interventions aimed directly at behaviour change, leaving issues of conscious and unconscious processes of cognition, emotion or motivation unaddressed.

The sequences of Figure 1 are understood in different ways by different models. Importantly, however, biases can be introduced at any level. There may be biases in what is focused on. This reflects the phenomena that is chosen for study. For example, many feminist writers have suggested that there is a masculine bias even at the beginning of what is worthy of investigation. Crucially, observations can be selective excluding from view processes not pertinent to the chosen model. If (for example) one only explores 'behaviours' then no insights into cognitions, motives, or emotions are likely. There may be biases in *how* observations are made or what they mean. Processes that are successful as interventions can be wrongly seen as linked to causes. Discovering that aspirin relieves pain does not indicate that a lack of aspirin causes pain. The success of any specific therapy does not mean is offers a good theory of cause.

**The Interventions**

Given the different models of psychotherapy, there are controversies and challenges regarding the nature of the evidence in favour of certain models. For example, there have

been many debates about whether change arises from common factors (e.g., the therapeutic relationship) or specific factors (e.g., behavioural exposures and practices) (Cuijpers, Reijnders, & Huibers, 2019). Both contribute to variance. Poor therapeutic alliances are not conducive to good outcomes, but equally, as with most learning in life, be it maths skills, playing a sport, or driving a car, they require behaviour exposures and practices. Therapies that do not address both may be less effective (Carey, 2011). But it is more complex than general versus specific because there are also many sources of individual difference, including background, current context, gender, ethnicities and phenotypes.

Different therapies have generated different wisdoms and interventions that are now being shared across different schools. Although there is much fragmentation in psychotherapy there are also increasing overlaps and commonalities. For example, many therapies share interventions such as the following: the importance of creating a supportive therapeutic relationship and therapeutic alliance, Socratic dialogues, guided discovery, insight and self-discovery, psychoeducation, skills training, inference chaining, attention and mindfulness training, exposure to the feared and avoided, addressing defences and non-conscious content, behavioural practice (including meditative practice), empathy training. The list is far from exhaustive. Many of these interventions either explicitly or implicitly aim to help people in a variety of ways such as:

- Offer some kind of psychoeducation on how the mind works; and hence the process of therapy. For example, cognitive therapists explain the link between thinking and feeling while compassion focused therapy focuses on the nature of the evolved brain and how and why it is creates the problems it does, thus depersonalising difficulties.
- Using the framework offered by the therapy to become more aware of, and more 'mindful' of, the complex contents and flows of the mind.
- With increasing awareness comes being able differentiate different mental processes (e.g., different emotions, thoughts or motives; the mind as a fruit salad rather than a smoothie).
- With increasing awareness and differentiation come the need to tolerate some of these mental processes that may have been feared or avoided in numerous ways; to develop sources of inner courage.

- To recognise and tolerate one's mind as inherently ones of internal conflicts (e.g., of emotions, thoughts and motives); we can feel and want to do contradictory things at the same time.
- Develop competencies to empathically explore one's mind and that of others, making sense of what arises and flows through our own minds and that of others; others are not alien to us; we can mentalise.
- Discover new variations of these mental process – maybe starting to think, feel or become motived in new ways that might have been previously outside the person's experience or awareness.
- Help to build new meanings and increasing new 'positive' dimensions to one life style.
- As these come together there are opportunities not only for 'recovery' or 'remediation' but discovery and transformation – not going back to some 'pre-existent well state' but creating new patterns of organisation that at times may need to accommodate changes (e.g., coming to terms with injury, disease and loss).
- Transformation may create unpredicted patterns of re-organising beliefs and motives and values – even a sense of self and self-identity. Core too to transformation will be changed physiologies.

As these unfold, we become consciously more 'aware' and hence more flexible and in control of our minds and behaviour. Flexibility is an emergent property of minds and bodies, enabling us to be more open to, and mature, our inner (archetypal) potential for engaging and responding to the challenges of living. Crucially though, all such competencies are directed by motives, and these can be prosocial to self and others or antisocial. Thus the moral dimension of how we use competencies like empathy or flexibility, need to be better articulated.

*Dualism.* Another challenge is dualism. For example, issues of tolerance and flexibility are central physiological concepts including the notion of phenotypic flexibility. From musculature, to cardiovascular, to immune systems, the flexibility of the system to cope with demands and challenges is crucial its functioning. There are many development processes that enable physiological systems to 'acquire' flexibility. Fisher, Granger, & Newman, (2010) also highlight that flexibility is dependent and baseline states. For example, the higher the

'starting' arousal the less flexible systems are. These are crucial issues to get out of old fashion, Descartian dualism and think about bodies, minds and contexts as integrated systems (see Siegel, this volume). Hence, future therapies will involve helping people develop the physiological infrastructures they need (e.g., frontal cortical and vagus competencies) to engage in their psychological journey and create better integrated minds (Petrocchi & Cheli this volume; Siegel, this volume). One of the reasons psychotherapies may do poorly is that little attention has been given to developing clients physiological competencies and infrastructures; indeed this is one reason why Compassion Focused Therapy spends so much time on compassionate mind training as a way of developing these competencies (Kirby, Doty. Petrocchi, & Gilbert, 2017).

*Non-linearity*. Not only are we locked into dualistic models of mind and body but we have outdated concepts of change processes. For example, some clients may at first get worse as therapy engages with (say) previous trauma or they embark on difficult life decisions. Second change can be non-linear in another way. Gilbert (1984), using what was then called catastrophe theory (and now chaos theory), noted that many states like depression are non-linear. Rather state changes can be sudden and change processes can move between points of stability and instability or tipping points. Similarly, because psychotherapy is working on and through multiple systems at the same time, change can be erratic. Indeed, developing non-linear models of change is a challenge for future psychotherapy as we understand better what brings people to their points of change in their internal organisation (Chamberlain, & Butz, 2016)

*Assessing effectiveness.* Given the above, psychotherapists are recognising that Randomised Controlled Trials of pitching one linear, domain-specific model against another is relatively wasteful. Money would be better spent on integrated process research, exploring individual differences in multiple domains of functioning and creating tailored and personalised, social and cultural relevant interventions (Norcross, & Wampold, 2011). Building evidence-based models to determine what works best for whom, with what condition, under what set of circumstances has been one of the leading concerns for the rise of the call for empirically supported therapies (Paul, 1967; Roth, & Fonagy, 2006). Clearly, any scientific approach must root itself in evidence. However, these areas of research also have problems. For example, as noted above psychotherapy research has been too tied into medical models, and the formulae if diagnosed with X then do Y; or finding an intervention for 'disorder X' rather

than ‘process Z’, or writing a manual to treat ‘X’. This can also imply that something has ‘gone wrong;’ there is an ‘error’ in how this person is thinking or behaving rather than as variations in copying strategies and common ways humans try to cope with life challenges (Nesse, 2019).

Second, in the pursuit of evidence it is clear that currently the extent and quality for evidence for psychotherapy is a challenge. For example, even for cognitive therapy of depression, recovery rates are not much greater than 50% and of those many have relapsed when followed-up (Cuijpers, Berking, Andersson, et al., 2013; Hollon et al., 2005; Hollon, Stewart, & Strunk, 2006). But we should not be surprised by this given the discussion above; it may have more to do with a certain naivety than the therapy. The therapy maybe good for certain types of *specific processes* but not for DSM diagnosed disorders. For example, for a long-time depression, with its symptoms of low mood, fatigue and negative views of self and future, has been seen as a common pathway, an end point of multiple factors and processes (Akiskal & Mckinney, 1973). Entering people into trials primarily on the basis of diagnosis is riddled with problems. People are hugely variant: some will have histories of trauma, some will have complex attachment patterns that challenge the building blocks of the therapeutic relationship, some will be living in toxic environments of high expressed emotion, lack of a confident, poor social support, loneliness, poverty, unemployment – all factors well known to be linked to depression (Brown, Adler & Bifulco, 1988). Some will be of recent onset others more chronic. Some will have undetected physical health problems (e.g., low testosterone (Zarrouf, Artz, Griffith, Sirbu, & Kommor, 2009) and thyroid (Gold, Pottash, & Extein, 1981)) and increasingly some depressions are being linked to poor gut health (Lima-Ojeda, Rupprecht, & Baghai, 2017; Dunn, 2011). These are rarely assessed.

This indicates another challenge, which we have been implying all through this paper, that we cannot understand the causes, relief and prevention of mental health problems by only looking at a limited number of specific processes, internal to the minds of those who suffer. There is increasing recognition that mental states are final common pathways of multiple complex interacting processes requiring evolutionary rooted, integrative biopsychosocial models (Gilbert, 1989, 2016; Rutter 1987; Siegel, this volume; Petrocchi & Cheli, this volume). These require a broader integrative cross discipline science (Henriques, 2008), which Wilson (1998) called *consilience* (Siegel, this volume).

**The emergence of modern therapy and its evolutionary roots: A short history**

Some of the above challenges can be traced back the rapid expansion of knowledge over the last few hundred years. As scientific knowledge increased exponentially since the 18th century science became increasingly split, segregated and divided and subdivided. No one mind could know all or most, even within even one discipline. Careers became increasingly fixed on sub-specialities of sub-specialities. The problem is human minds and bodies don't work like that and we are going to be disadvantaged if we don't know how to put these silos of knowledge back together again (Gilbert, 2018). But we need a framework to do that. The problem is that the world of machines, computers and 'information processing systems' have de-contextualised how we think about minds. Human bodies and minds are emergent entities in the flow of life that come into the world with needs and abilities ready to unfold. Before we move forward we will need to return to our past and (re)claim our heritage of thought that saw the inherent struggles of humanity, and it was from these struggles that mental health problems arise.

At the turn of the last century, Darwin's discoveries, that our physical forms and mental competencies emerged from the evolutionary struggles for survival and reproduction, led to the recognition that we are just another species on this planet, cousin to dinosaurs and monkeys. However, this was a radical shock to many. Religious individuals were quick to denounce it. The battle between science and religion, that had simmered for centuries, sprang into new arenas. Copernicus had shown us that we were not the centre of the universe and now Darwin revealed that we are descended from previous species, not created uniquely by a God. Moreover, as just another species in the flow of life, we carry many of the same basic motives and emotions as other lifeforms in the struggle for survival and reproduction.

This triggered an existential panic about what it means to be human and have a human mind. On March 13, 1925 John Washington Butler succeeded in having the House of Representatives of Tennessee pass a bill making it a criminal offence to teach evolution and deny the reality of divine creation. It became known as the Butler Act. Those arguing that teaching should be based on science not faith or belief, headed for the courts. John Thomas Scopes put himself forward to defend the importance of 'scientific' teaching. He lost the case and was fined $100 (around $1,400 today). The Butler Act was not repealed until 1967. But even now there are major sections of educational establishments that deny evolved realities and challenges. Turkey is currently banning evolution in higher education and removing it

from biology books (Jolley, 2018). There are many parts of the world where denial of faith can get you killed - so strong are the evolutionary dictates of tribal psychology! Many scientists however realise that little in biology or indeed psychology, and we would argue therapy too, makes sense without an understanding of evolutionary processes and their contextual choreographers. Deepening our understanding of our evolved nature, and how it fits or is a mismatch with modern culture, may be essential for developing better therapies and preventions in the future (Gilbert, this volume).

*Evolutionary approaches today*. Despite the resistance, today most psychotherapies recognise the importance of evolutionary insights for understanding the mind (Baron-Cohen, 1997; Bowlby, 1969; Ellenberger 1970; Gilbert & Bailey, 2000; Knox, 2003; Nesse, 2019; Wilson & Hayes, 2018). Freud was one of the first to root his understanding of the problems of the human mind in evolutional functional analysis. On this theme Ellenberger (1970) says:

> Psychoanalysis evidently belongs to that "unmasking" trend, that search for hidden unconscious motivations characteristic of the 1880s and 1890s. In Freud as in Nietzsche, words and deeds are viewed as manifestations of unconscious motivations, mainly of instincts and conflicts of instincts. For both men the unconscious is the realm of the wild, brutish instincts that cannot find permissible outlets, derived from earlier stages of the individual and of mankind, and find expression in passion, dreams, and mental illness. Even the term "id" (das Es) originates from Nietzsche….. Before Freud, Nietzsche conceived the mind as a system of drives that can collide or be fused into each other. In contrast to Freud, however, Nietzsche did not give prevalence to the sexual drive (whose importance he duly acknowledged), but to aggressive and self-destructive drives (p.277).

Freud was in a socially contextualised world with the philosophies of Nietzsche and Schopenhauer, both of whom saw life as full of suffering and struggle. Schopenhauer in particular took a view Buddhist view (part of Eastern traditions for many centuries) in regard to the inherent suffering of life. Important too was Mary Shelley's classic, *Frankenstein,* first published in 1818 when she was just 20. It was a reflection on why we are created to suffer, with a despair for feeling an outcast; an old story harking back to Adam and Eve and a creator that had turned his back on us in disappointment at his creation. Then in 1886 came Robert Louis Stevenson's Dr Jekyll and Mr Hyde. So powerful was this analogy of humans fighting with their dark side that it became adopted into everyday language to describe

ourselves. These were the zeitgeists of the age, when psychologists, philosophers and writers were wrestling with the meaning of life (given that it is short and for many, especially the poor, harsh and miserable) and the causes and nature of suffering; Freud was soaked in this zeitgeist

Although the recognition of the shaping of our minds by evolution had been set, there arose increasing variations on how these concepts were adapted and adopted. Freud's drive theory is quite different to Jung's concept of archetypes (Ellenberger, 1970) which overlap but differ from attachment theory (Bowlby, 1969; Knox, 2003; Stevens, 1982). Different again are the more recent uses of evolutionary concepts. For cognitive therapy, Beck articulated evolutionary underpinnings for anxiety (Beck et al., 1985), depression (Beck, 1987) and personality disorders (Beck et al., 1990). Marks (1987) highlighted the importance and evolutionary understanding for evolved defence mechanisms and behaviours in behavioural approaches. Wilson and Hayes (2018) have brought together writers addressing the evolutionary underpinnings of contextual behavioural science. Emotion focused therapy is rooted in an evolutionary understanding of emotions (Greenberg, 2004). The interpersonal neurobiology approach to therapy is linked to basic evolved mechanisms and needs (Siegel, 2015, this volume). Some therapies integrate interventions based on knowledge of the evolved autonomic nervous system, especially its adaptations through the mammalian attachment systems such as Porges' Polyvagal theory (2009). Van der Kolk (2014) argues that the *body keeps the score*, highlighting the importance of basic, evolved systems that are open to classical conditioning, with direct body changes that do not require conscious cognition. Despite the differences in theory and process there is an increasing recognition of the need for our science to be underpinned by evolutionary, contextual frameworks that address human needs and competencies. The basic themes of the early therapy models, relating to the inherent suffering of life, the instability of and the dark sides of our minds, the inner battles of Jekyll and Hyde, need to (re)texture our profession (Gilbert, 2018).

**The challenges reconsidered**

Today we stand in the foothills of our abilities to use a range of sciences to understand the vulnerabilities to, and forms of, mental health problems and develop new interventions derived from biopsychosocial and integrative models of mind-brain-body and social context (Gilbert, 1995, 2016); that is *an integrative, evolutionary and contextual biopsychosocial science*. For example, we no longer see genes as set instructors but rather their expression can

vary through a process called methylation. Recent studies in epigenetics even show that methylated changes to genes can be passed from generation to generation (Kumsta, this volume; Shonkoff, Garner, Siegel et al., 2012). This is extraordinarily important when we recognise how social contexts, particularly contexts of war, poverty stress and family discord may well be influencing genetic expression through the generations. On the upside however, methylation can go both ways, for good or bad, and research is beginning to explore the potential for psychological interventions to impact on these biological processes (Kumsta, this volume).

We are also beginning to recognise that phenotypes are important not only for specific vulnerabilities but also for responses to specific interventions. New scientific findings are revealing the importance of the link between diet, inflammation, gut bacteria and mental health states, and how these in turn are linked to the regulation of the autonomic and central nervous system (Lima-Ojeda, Rupprecht, & Baghai, 2017; Dunn, 2011). New research has revealed that the balance between the sympathetic and parasympathetic system (e.g. as measured by heart rate variability) can plays a major role in our ability for affect regulation and links into important frontal cortical control mechanisms (Thayer, Hansen, Saus-Rose, & Johnsen, 2009). Our ability to feel socially safe and socially engaged impacts on parasympathetic tone, that in turn, influences affect regulation and social engagement (Kirby et al., 2017).

There are ways of balancing the adaptive interaction of the sympathetic and parasympathetic systems, such as with exercise, diet, breath training, rehearsed visualisations and behavioural practices. Indeed, recent research has shown that the human brain is not choreographed once and for all in early life but changes throughout life via processes like neurogenesis and neuroplasticity which are constantly operating to change our brains for better or worse. There is increasing recognition that psychotherapeutic processes need to pay attention to the two-way streets of physiological changes that are capable of bringing psychological change. For example, individuals who struggle with utilisation of the vagus tone may continue to struggle with affect regulation unless they are helped to develop frontal cortical and ANS regulators (Gilbert, 2015; Kirby et al., 2017). Therapies are developing in to forms of *neurophysiotherapy* and these will become hallmarks for the future.

Central to many of these processes is also a recognition that humans have evolved to be highly (eu)social (Dunbar, 2017). Indeed, many human phenotypes are choreographed in and through relationships. We are born the most immature of all mammals and require extensive caring (Narvaez, Panksepp, Schore, & Gleason, 2013), and it is in these interactions that a range of physiological systems are organised and choreographed (Siegel, 2015). The quality of our early relationships impact on the methylation of our genes, the maturation and operation of the amygdala-hypothalamic-pituitary-adrenal axis that underpins the threat system processing, and the patterning of the autonomic nervous system, particularly the vagus and its relationship with the frontal cortex, which underpins prosocial behaviour. In addition, we now know the human evolution of conscious awareness, with of a sense of self, allows us to objectify the self. This enables us to experience ourselves as a set of internal relationships such that we can experience parts and patterns of ourselves and know them as 'inner patterns of mind'; 'ourselves as': as angry, anxious sexual, joyful. We can future think as in imaging our self as we want to be and don't want to be. We can be judgemental of our mental states and patterns and have hostile internal, critical dialogues, or validating, supportive caring ones.

Central to this revolution in understanding mental health is the importance of understanding social context. Increasingly, we are moving away from medical psychopathology models of mental health difficulties to socially contextualised ones. These models facilitate the ability to be biologically sensitive while at the same time recognising the complex interactions between social environments and phenotypes. For example, evolution gives rise to variations in survival and reproductive strategies such that organisms can adapt to different environmental niches in which they exist. In high threat and unstable environments, it may be adaptive to develop very different orientations and behavioural repertoires than in safe and stable environments (Del Giudice, 2016). In the former, brains will be orientated for threat sensitivity and opportunistic self-focused behaviours whereas in the latter it is more adaptive to develop open, trusting and cooperative strategies. Yet we can be quick to pathologise the former as 'mental health illness or personality disorder'. This also introduces an important issue of morality and ethics and how these themselves are choreographed through the construction of culture and its organisational processes such as economic relationships and politics. Psychotherapy should not be shy of indicating the degree to which economic relations (e.g., unregulated capitalism and competitiveness), political beliefs, and the media can create environments that are toxic to psychological and physical health (Gilbert, 2018).

**Conclusion**

The purpose of the special edition is therefore to highlight the importance of moving away from tribal-based models towards more scientific-based, pluralistic, integrative process ways of thinking about mental health problems, therapy, and mental and social well-being. This means that the therapy of the future will be a form of neuro-physio-social psychotherapy where clinicians are working with mind-body and social context. Therapists will be able to provide new insights for their clients about the nature of the mind and offer practices and training to help them adapt and change psycho-physiologically to their internal and external worlds in ways that are conducive to prosocial behaviour towards themselves and others. Importantly psychoeducation can be used to help clients recognise that much of what arises in their mind is not their fault, but are from the emergence of complex evolved potentials, genetic, physiological and social interactions. By understanding the origins and functions of our minds we are better placed to take responsibility for their outputs and address their dark sides that can be so harmful to oneself and others. The future of psychotherapy will move towards an integrative, evolutionary and contextual biopsychosocial science that places far more emphasis on developing the prosocial and moral in us rather than just personal adjustments. While the moral dimensions of psychotherapy deserve a more central place in our models and training, and have been subject to philosophical debate, currently the compassion focused therapies are the only one's putting the building of a prosocial (be helpful not harmful) identity at the heart of its approach.

**This edition**

Responding to some of the challenges outlined, this edition unfolds with Gilbert offering a scientific framework for *an integrative, evolutionary and contextual biopsychosocial science.* This is followed with a major review by Kumsta on the relevance of epigenetics, for both psychology and psychotherapy. The physiological and epigenetic impact of psychotherapy is a major research area of the future. Individuals with different genetic profiles may respond to different types of therapy. Petrocchi and Cheli offer a major overview of how and why psychotherapies need to pay more attention to the body with a specific focus on the autonomic nervous system. Core, as they outline, is the social regulators of our bodies and physiologies. Siegel then brings us up-to-date on his interpersonal neurobiological approach that brings together many of these themes and how they texture therapeutic process. He raises questions about mind training as well. These papers outline basic models while the last three

address applications of: family, culture and technologies. If we are to make further progress in prevention, then clearly we need to be working with families and their social contexts. These themes are explored by Kirby, Sampson, Day, Hayes, and Gilbert who highlight that we are raising children in family environments increasingly different to what our brains and bodies evolved to operate in. Problematic too is the increasing emphasis on competitive dynamics and the shame of failing in parenting. Edge guides us thought key themes to inform our thinking and service provision in regard to social contexts increasing our awareness of gender and ethnic diversities, both in terms of the source of vulnerabilities and appropriate interventions. In our increasing multi-culture worlds, and traumatised refugees, such concerns are becoming more urgent, especially as some political leaders appeal to tribal diversion and boundaries. One size does not fit all. Last but not least, Bucci, Schwannauer & Berry, address the key issue of how to help people avail themselves of psychological science underpinning self-help. A quick look at the epidemiology of mental health problems reveals that there is no way individual or group therapies are going to remotely address need. The vast majority of people on this planet have no access to therapy of any kind. We have to find new ways of helping people to relate to themselves and others in more prosocial ways. Modern technology is obviously one of the mediums for doing this. However, in addition we need to expand the focus from self-help to mutual and relational help such that we can use technologies to build more prosocial styles of relating and prevent some of the harmful ones.

So the future of psychotherapy is going to require a much more concilient science. We hope that this selection of papers can be a contribution to the orientation of the kind of psychotherapeutic thinking we need for the fast changing future.

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