

The EMCAPP Journal

Christian Psychology Around The World

Some of the Main Articles

- The Invisible Body
- Transhumanism – the Great Danger?
- EMDR and the Body in Christian Therapy
- and others

Focus Topic:

**“Body Aspects in Christian Psychology,
Psychotherapy and Counseling”**

Editorial

Discussions about the body-soul distinction and how these two human dimensions of human nature interact (with some adding the concept of spirit) is a familiar topic of Christian psychology and counseling, as well as of theology, that ultimately extends throughout church history.

So why do we choose to focus on this topic as the main theme of this issue of Christian Psychology Around The World?

In my opinion, the focus in psychology and psychiatry in recent years and decades has increasingly turned to the importance of the body and brain and interest in the exclusively mental aspects of human life have moved into the background.

The scientific advances of neuroscience, biochemistry, and medicine enable us to increasingly “dissect” the living human body, to perceive, record, and analyze its reactions to our everyday lives. In principle, we have found that neurobiological events correspond to every human behavior and experience, but we have also learned that these bodily processes can be influenced by one’s thoughts and activities, so that, our culture hopes, we can change our behavior and experience much more easily than through lengthy therapeutic or pedagogical procedure.

Furthermore, because of an emerging transhumanism, we can envision the development of a better person, whether in terms of ethical choices or performance. Short-term changes or even multi-generational influences through technical interventions, for example, with the help of computers, could soon become part of everyday life.

Some articles in this issue deal with such new challenges. Others look at topics that explore the interaction between body and soul, especially in therapy and counseling.

My thanks go to the authors of this issue, but especially to the artist, Jason K. Dy of the Philippines, who has made his works available to us and thus challenges all of us to greater creativity, which enables us to imagine change, in order to perceive the signs of the times and to help form the future, which corresponds with all of the contributions of this issue.

Yours,
Werner May



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Why do we have a bilingual journal?

In our movement for Christian Psychology, we meet as Christians with very different backgrounds: different churches, different cultures, different professional trainings...

There is a common desire for the movement, but highly “multi-lingual” ideas of its realization! Therefore, a bilingual journal is just a small reference to our multilingual voices to remind us:

- Languages are an expression of cultures, countries and of their people. By writing in two languages, we want to show our respect to the authors of the articles, to their origin and heritage, and at the same time symbolically show respect to all the readers in other foreign countries.
- There are many foreign languages that we do not understand. Within our own language, we intend to understand one another, but we fail to do so quite often. To really understand one another is a great challenge, and we also want to point to this challenge by offering a bilingual journal.
- “When languages die, knowledge about life gets lost.” (Suzanne Romaine, 2011)
- Finally, there is a pragmatic reason: As we want to have authors from one special country to write the main articles of every journal, it will be easier for them to distribute the journal in their own country, when it also is in their own language.

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Around The World: The Contributors





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Christian Psychology Around The World

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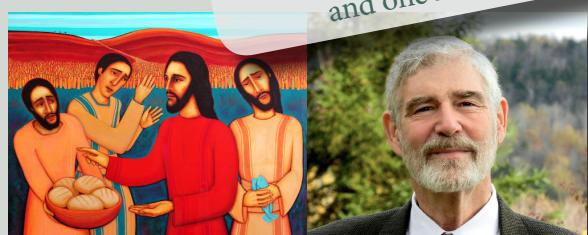
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- On Christian Psychology: An interview
- Relational Theology and Relational Therapy
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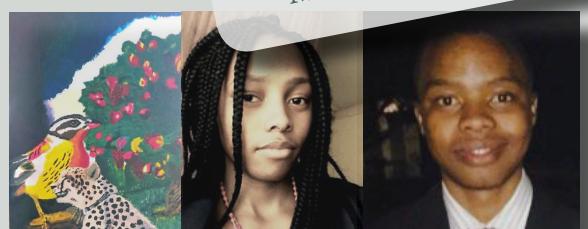
Read our seventh number:
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- 'Psyche' or 'soul'? Towards a Christian Approach to Anthropology in Pastoral Caregiving and Spiritual Healing
- Christian Community Psychology
- An assessment of current counselling practices in churches in South Africa

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Focus country: South Africa
Main articles in English



The main articles - Journal 9

- My Therapy Aim–Your Therapy Aim–God’s Therapy Aim?
- The Moral Word in Reconstruction of Person in Christian Psychotherapy
- To What End? A Christian Psychology Perspective on the Goals of Psychotherapy
- Spiritual Maturity – Can it be an Aim or Goal of Christian Psychotherapy?



Read our ninth number:
Focus topic: „Therapy goals“
from the perspective of Christian
psychologie

The main articles - Journal 10

- Conscience and faith in Christian counselling practice
- Christ and the Spirit
- Psychological reasons for avoiding happiness
- Honoring & Nurturing Conscience in Psychotherapy



Read our tenth number:
Focus topic: „The Importance of
Conscience for
a Christian Psychology“

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- Religious identity, when compared to other identities
- Trauma and Christian Identity
- Several Psychologists answered: „How does your Christian faith help you in your practical work as a psychologist, counselor or therapist?“



Read our eleventh number:
Focus topic: „Professional
Conclusions, Intuition, Wisdom,
Guidance by the Holy Spirit - Who
is leading me during practicing
Christian Psychology?“

The main articles - Journal 12

- Religious identity, when compared to other
- Identity as the Father’s beloved: Functioning from rest amidst pressure
- Christian identity. A look from behind the iron



Read our twelfth number:
Focus topic: “What do we mean by
a Christian identity and what would
be the practical consequences?
A fundamental question for a
Christian psychology.“

About the Artist

Jason K. Dy, SJ (b. 1977, Philippines) was artistically inclined when he was young, but it was only when he was in high school that he started to develop his talents by joining art contests, making liturgical designs for communal worship and following art workshops. His art blossomed fully when he joined the Jesuits, who encouraged him to attend art workshops, art classes and conferences, accept book projects (e.g. illustration and lay-out), create logos

for institutions, visit exhibitions, participate in art groups and integrate art into his studies in theology. As a priest, he is now not only active in art production but also in art management and pastoral ministry for artists.

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Krzysztof A. Wojcieszek The invisible body

Doctor habilitated Krzysztof Andrzej Wojcieszek, professor Pedagogium - Higher School of Social Sciences in Warsaw, molecular biologist (UŁ), ethics (UŁ), doctor of humanities (philosophy, ATK), habilitation in the field of social sciences in the discipline of pedagogy (UAM in Poznań), author of many preventive programs widely used in Poland: „Noah”, „Debate”, „Correction”, „Barrier”, „Sellers”, „Taste of life or debate about afterburners”, „ARS, or how to care for love”, „Jungle” and others. Author of over 150 articles and books. Currently, he manages the Department of Social Prevention, Resocialization and Social Work at the WSNS Pedagogium. He served as President of the European Society for Prevention Research (EUSPR). Consultant of the sobriety apostolate team at KEP. A longtime associate of OAT in Zakroczym. Co-author of the National Sobriety Program in Poland (2018). Expert of many institutions. Father of three daughters.

Former article by Krzysztof:

<https://emcapp.ignis.de/1/#/28>

<https://emcapp.ignis.de/12/#p=70>

Is this not a mistake? Can the human body, this most tangible and specific of things, be invisible? If you are surprised, this is a natural reaction. As mine was, when many years ago I heard such a proposition from the lips of my teacher Mieczysław Gogacz, professor of Thomistic philosophy. I did not understand it completely, it seemed to me a mistake, and even ... a scandal. And here I have been asked to share my reflections on the subject of the human body.



Krzysztof A. Wojcieszek Niewidzialne ciało

Doktor habilitowany Krzysztof Andrzej Wojcieszek, profesor Pedagogium Wyższej Szkoły Nauk Społecznych w Warszawie, biolog molekularny (UŁ), etyk (UŁ), doktor nauk humanistycznych (filozofia, ATK), habilitacja w dziedzinie nauk społecznych w dyscyplinie pedagogika (WSE UAM w Poznaniu), autor wielu programów profilaktycznych: „Noe”, „Debata”, „Korekta”, „Szlaban”, „Sprzedawcy”, „Smak życia czyli debata o dopalaczach”, „ARS czyli jak dbać o miłość”, „Dżungla” i innych. Autor ponad 150 artykułów i książek. Obecnie kieruje Zakładem Profilaktyki Społecznej, Resocjalizacji i Pracy Socjalnej w Pedagogium WSNS. Pełnił funkcję prezesa Europejskiego Towarzystwa Badań nad Profilaktyką (EUSPR). Konsultor Zespołu ds. Apostolstwa Trzeźwości przy KEP. Wieloletni współpracownik OAT w Zakroczymiu. Współautor Narodowego Programu Trzeźwości. Ojciec trzech córek.

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Czy to nie pomyłka? Czy ciało ludzkie, coś najbardziej uchwytnego zmysłowo i konkretnego, może być niewidzialne? Jeśli jesteście zdziwieni, to jest to naturalna reakcja. Taka jak moja, gdy przed wielu laty usłyszałem taką właśnie propozycję z ust mojego Mistrza, profesora filozofii tomistycznej Mieczysława Gogacza. Zupełnie tego nie rozumiałem, wydawało mi się jakąś pomyłką, a nawet... skandalem. Cóż bowiem jest bardziej uchwytnie, niż nasze własne ciało? Tak wtedy myślałem. I oto zostałem poproszony o podzielenie się refleksjami na temat ludzkiego ciała.

1. Starting point: biological interpretation of the human body.

Before I heard these scandalous words, I went through a fairly long study natural science. Nature fascinated me. Perhaps such interests are typical for many boys. I attended a biological laboratory on a regular basis, I spent time with a microscope, passionately (yes!) I collected fossils. I became an expert on some paleontological questions at the age of 12. When I passed the entrance examination for biological studies, I took first place among 500 candidates. Then I also studied passionately, choosing the specialty of molecular biology. The studies demanded hard work, sometimes there were 45 hours of classes per week. I finished them with a „medal for outstanding studies“. When I heard these „scandalous“ words, I was work as a biologist in the laboratory of one of the institutes of the Polish Academy of Sciences. From the beginning to the end I was shaped as a competent naturalist. No wonder the idea of the „invisible body“ completely surprised me.

Anyway, when I was discussing the title of my text with the editor, I also sensed some surprise and scepticism. Meanwhile, after many, many years, I understood my teacher's intentions (or so I think). Yes, we do not see our body. We have to guess its existence from the effects of our actions, indirectly. But how to explain it to people who have not had 30 years of research like me? I must rely on the fact that readers are smarter than me and find the truth through their own inquiry. Therefore, my role will be modest: to encourage, construct and set up signposts.

2. The first signpost - the difference between the body and the organism.

While I write these words, in my body life is flourishing, even exploding. And it is not my life, but the life of over a thousand separate species in billions of copies. Biologists call them microbiota. They are various bacteria, fungi, invertebrates that permanently live on us and in us, like on their own planet. They are „Martians“ and we are „their Mars“. Their role is different, they are usually react indifferently, they treat us as a convenient environment for their own lives. Many of them are very useful, which we can easily find out when we finish any antibiotic treat-

1. Punkt wyjścia: biologiczna interpretacja ludzkiego ciała.

Zanim usłyszałem te skandaliczne słowa przebyłem dość długą drogę kształcenia przyrodniczego. Fascynowała mnie przyroda. Być może dla wielu chłopców takie zainteresowania są typowe. Uczęszczałem regularnie do pracowni biologicznej, ślećzałem przy mikroskopie, namiętnie (tak!) zbierałem skamieniałości. Stałem się w wieku 12 lat znawcą pewnych zagadnień paleontologicznych. Gdy przyszło zdawać egzamin wstępny na studia biologiczne zająłem pierwsze miejsce na 500 egzaminowanych. Potem również namiętnie studiowałem obierając specjalność biologii molekularnej. Studia były pracowite, czasem było 45 h zajęć w tygodniu. Zakończyłem je z „Medalem za chłubne studia“. Gdy wysłuchałem wspomniane „skandaliczne“ słowa, to pracowałem już jako biolog w laboratorium jednego z instytutów Polskiej Akademii Nauk. Byłem od początku do końca ukształtowany jako kompetentny przyrodnik. Nic dziwnego, że idea „niewidzialnego ciała“ zupełnie mnie zaskoczyła. Nie tyle oburzyła (szanowałem mego Mistrza), ile była zwyczajnie niezrozumiała.

Zresztą, gdy ustalałem z Redakcją tytuł mojego tekstu, to również wyczułem pewne zaskoczenie i sceptyczny. Tymczasem ja, po wielu, wielu latach, zrozumiałem intencje mojego Mistrza (a przynajmniej tak mi się wydaje). Tak, naszego ciała nie widzimy. Musimy się domyślać jego istnienia po skutkach naszych działań, pośrednio. Ale jak to wyjaśnić osobom, które nie mają na to dociekanie 30 lat, tak jak ja?

Pozostaje liczyć na to, że Czytelnicy są bystrzejsi ode mnie i drogą własnego dociekania odnajdują prawdę. Moja rola będzie zatem skromna: zachęcać, konstruować i rozstawać drogowskazy.

2. Drogowskaz pierwszy - różnica między ciałem a organizmem.

Gdy piszę te słowa w moim organizmie kwitnie życie, wręcz wybucha. I nie jest to moje życie, ale życie ponad tysiąca odrębnych gatunków w miliardach egzemplarzy. Biolodzy nazywają je biomem. Są to rozmaite bakterie, grzyby, bezkręgowce, które na stałe żyją na nas i w nas, niczym na jakiejś własnej planecie. To „mars-

ment. Lack of the microbiota we've back gives us a hard time. We must take so-called probiotics, drink different kefirs. In each of us there are several kilos of these necessary „strangers“. We will agree that everyday defecation does not deprive us of our body parts? And human faeces are trillions of Escherichia coli bacteria. This microbiota is part of our organism, part of the complex whole - the organism. Not a “body”, but a system called the “organism”. These beings who sail with us have their own lives, their own DNA, their own history. Sometimes they cause us trouble, they usually react indifferently, are sometimes very useful, even necessary. So there is SOMETHING in us which is NOT US? Yes, for sure. Together, we are a vibrant system.

3. Second signpost - metabolism.

At the moment when I do a protein test in a sample taken from my organism, e.g. in the blood, do I examine part of my “body”? Well, rather not. A huge number of atoms and molecules are flowing through man. Some of them stay in us and for a long time. However, even these „long-distance runners“ eventually flow through us and leave our borders. Apparently, all the atoms that sit in us are exchanged every few years, about seven times in a lifetime. Let's take something that is clearly distinct, a metal atom, for example an iron ion embedded in a molecule of haemoglobin. It serves us some time and then leaves our area and remains an iron ion. At first it was not “our body”, then it was, and then it was not again? It seems that this stay in us has not changed him at all. Which one he came in and left. It remained itself. Of course, in quantum terms, it has become „something else“ during this period, but not permanently. After leaving this quantum CONTEXT, this open thermodynamic system in the form of our organism (careful: not the “body”, but just the “organism”), it is indistinguishable from all of its iron atom brothers. There is no indication of its stay in us.

Our stream of matter and energy is constantly flowing through us. We are a river. Looking at the whole river from the shore, do I really see at the whole river? I remember a very difficult exam in the field of static biochemistry. It lasted about eight hours (yes!). The lecturer dictated

janie“, a my to „ich Mars“. Różna jest ich rola, zazwyczaj są nam obojętne, traktują nas jako dogodne środowisko własnego życia. Wiele z nich jest bardzo przydatne, o czym możemy się łatwo przekonać kończąc dowolną kurację antybiotykami. Brak przetrzebionego biomu daje się nam we znaki. Musimy brać tzw. probiotyki, pić różne kefiry. W każdym z nas egzystuje kilka kilogramów tych niezbędnych „obcych“. Zgodzimy się chyba, że codzienna defekacja nie pozbawia nas części naszego ciała? A ludzki kał to tryliony komórek bakterii Escherichia coli. Ten biom stanowi część naszego organizmu, część skomplikowanej całości - organizmu. Nie ciała, lecz pewnego systemu zwanego organizmem. Te istoty, które z nami żeglują mają własne życie, własne DNA, własną historię. Czasem robią nam kłopoty, zazwyczaj są obojętne, niekiedy bardzo przydatne, wręcz konieczne. Zatem w nas jest COŚ, co nie jest NAMI? Tak, z pewnością. Razem stanowimy tężniący życiem system.

3. Drogowskaz drugi - przemiana materii.

Czy w momencie, w którym dokonuję badania stężenia białka w pobranej z mojego organizmu próbce, np. we krwi, to badam część mojego ciała? Otóż raczej nie. Przez człowieka przepływa ogromna ilość atomów i cząsteczek. Część z nich trwa w nas i przy nas bardzo długo. Jednak nawet ci „długodystansowcy“ w końcu przez nas przepływają i opuszczają nasze granice. Podobno wszystkie atomy, które w nas „siedzą“ wymieniają się co kilka lat, jakieś siedem razy w ciągu życia. Weźmy coś, co jest wyraźnie odrębne, jakiś atom metalu, chociażby jon żelaza wbudowany w cząsteczkę hemoglobiny. Jakiś czas nam służy, a potem opuszcza nasz obszar i pozostaje jonom żelaza. Najpierw nie był naszym ciałem, potem był, a potem znów nie był? Wydaje się, że ten pobyt w nas wcale go nie zmienił. Jaki wszedł, taki i wyszedł. Pozostał sobą. Oczywiście w ujęciu kwantowym stał się „czymś innym“ w okresie tego pobytu, ale nie na trwałe. Po opuszczeniu tego KONTEKSTU kwantowego, tego termodynamicznego układu otwartego w postaci naszego organizmu (uwaga: nie ciała, lecz właśnie organizmu) jest nie do odróżnienia od wszystkich swoich braci atomów żelaza. Nic nie wskazuje na to, że w nas



to us the name of a chemical compound, which usually simply rums in “our body” as a TEMPORARY part of it, and we had to write out the structural formula from our memory in our sheets. I was one of the few who passed at the first attempt because I was physically strong. Some of the examinees, especially women, simply fainted and gave up. There I see in my imagination all these molecules, conformations, D- and L-turns, etc., etc., how they spin and flow through us. I know that when I write these words, my brain consumes gigantic amounts of ATP particles (our „chemical batteries”), because its work apparently absorbs as much as 1/4 of the entire energy expenditure of the “body”. Fortunately I had eaten a solid dinner.

Let’s focus our gaze on a single atom or molecule and see how it literally flows through us, on the scale of the hour, day, year ... Is this what’s flowing like this our body? Why, when it leaves our area, does it cease to be body? It is as if a citizen arriving in a foreign country became his citizen, and after leaving the country immediately lost the citizenship.

And yet we only see elements of this flow. When we decide to study molecules of some protein, we are investigating „something“ which is not our body in the strict sense. We do not arrange funerals for trimmed nails or cut hair. And this is a noble keratin, one of the proteins in our body. Perhaps our curls delighted somebody, but later they are cut off on the floor of a hairdressing salon.

At the same time, we have the knowledge that the fate of such molecules in our body is not arbitrary. Basically, they work in a very regulated way. They have their place and their role. They are like actors on stage. And the scene is highly ordered. You can see it when something goes wrong, as when someone swallows a little potassium cyanide and this substance „clogs“ our mitochondria, blocking the respiration at the cellular level. How precise the constant motion this structure is, if it is damaged by such a small thing. And there are even more subtle poisons. They enter us and somehow „lie“. They are like foreign agents. Something is jamming. It does not matter whether I look at myself or someone else, I can see directly only the independent atoms, molecules - something WHICH is NOT

przebywał.

Nieustannie płynie przez nas strumień materii i energii. Jesteśmy rzeką. Czy patrząc z brzegu na fragment nurtu patrzę na CAŁĄ rzekę? Pamiętam bardzo trudny egzamin z biochemii statycznej. Trwał około 8 godzin (tak!). Wykładowca odczytywał nam z katedry nazwę jakiegoś związku chemicznego, który akurat zwykła buszować w naszym organizmie jako jego TYMCZASOWA część, a my musieliśmy z pamięcią wypisać wzór strukturalny w naszych arkuszach. Byłem jednym z niewielu, który zdał za pierwszym podejściem, bo byłem fizycznie mocny. Część zawodników, a zwłaszcza zawodniczek po prostu mdlała i rezygnowała. Teraz widzę w wyobraźni te wszystkie molekuły, konformacje, D-i L-skrętne itd. itp., jak wirują i płyną przez nas. Wiem, że gdy piszę te słowa mój mózg zużywa gigantyczne ilości cząsteczek ATP (nasze „chemiczne baterie“), gdyż jego praca podobno pochłania aż 1/4 całego nakładu energii organizmu. Dobrze, że zjadłem solidną kolację.

Skupmy spojrzenie na pojedynczym atomie czy cząsteczce i zobaczymy, jak dosłownie przepływa przez nas, w skali godziny, dnia, roku... Czy to, co tak płynie, to nasze ciało? Dlaczego, gdy opuści nasz obszar przestaje być ciałem? To tak, jakby jakiś obywatel przyjeżdżając do obcego kraju stawał się jego obywatelem, a po wyjeździe to obywatelstwo natychmiast tracił.

A przecież my dostrzegamy jedynie elementy tego przepływu. Gdy oznaczamy czy badamy molekuły jakiegoś białka, to badamy „coś“, co naszym ciałem w ścisłym sensie nie jest. Nie urządżamy pogrzebów obciętych paznokci czy świątych włosów. A to przecież szlachetna keratyna, jedno z białek naszego organizmu. Być może nasze loki kogoś zachwyciły, ale później leżą obcięte na podłodze salonu fryzjerskiego. Jednocześnie mamy wiedzę, że losy takich molekuł w naszym organizmie nie są dowolne. Zasadniczo działają w sposób bardzo uregulowany. Mają swoje miejsce i swoją rolę. Są niczym aktorzy na scenie. A scena jest wysoko uporządkowana. Widać to, gdy coś idzie nie tak. Gdy ktoś połknie odrobinkę cyjanku potasu i ta substancja „zatyka“ nasze mitochondria, blokując oddychanie na poziomie komórkowym. Jak precyzyjna jest ta konstruk-

me, but is only staying in me temporarily. Of course, I do not ignore the fact that if something comes into my body, in a certain quantum sense it becomes united with it, affects its other components and they affect this single element, in the sense of chemistry and quantum physics. However, when it leaves my body, it is indistinguishable from myriads of similar structures. It is not me. If a quantum stream reflected from my own or someone else's skin hits my eye, it is a stream reflected from individual objects – molecules, depending on the amount of melanin molecules in the skin cells, whether lighter or darker.

4. Third signpost: what is „underneath“?

I remember how I was surprised by the map of metabolic pathways, i.e. the transformation of all these objects in my body. Sugar comes in, and the carbon dioxide, water and energy stored in the bonds of phosphate residues in nucleotides come out. I had to learn it in detail. It was also a compulsory exam. I have several such maps at home so far. They were attached to biochemistry textbooks. The thicket of changes, ordered movement of chemical reactions managed by enzymatic catalysts. Reactions that could happen once in hundreds of years, thanks to enzymes, take place rapidly and massively. Our body is constantly in an unparalleled and organized movement. What is it based on? DNA comes to mind, but it is only a specific memory, the molecular memory of the body. Like a „hard disk“ with data. There must be something else, something that you CANNOT SEE AT FIRST. This is our body. Scaffolding on which the entire construction and processes are based. Special structural „access points“ for all these elements flowing through us in the form of metabolism. Structure and spatial ordering is important. If catalysis is to take place (acceleration of reaction), molecules or atoms (most often ions) that take part in it must be specially set up, more precisely than with machine parts. Only when joining a large protein molecule will they be set up properly – there may be catalysis. This is the rule of all catalysts. It suggests (only suggests!) that there must be some structural basis for metabolism, the type of scaffolding on which this movement is based and is ordered. It has been

cja w ciągłym ruchu, skoro uszkadza ją taki drobiazg. A istnieją jeszcze bardziej subtelne trucizny. Wchodzą w nas i jakoś „kłamią“. Są jak obcy agenci. Coś się zacina. Wszystko jedno czy patrzę na siebie czy na kogoś innego, to zasadniczo bezpośrednio widzę tylko samodzielne atomy, cząsteczki, molekuły - coś CO NIE jest mną, a tylko czasowo przebywa we mnie. Oczywiście nie ignoruję faktu, że jeśli coś trafia do mojego organizmu, to w pewnym kwantowym sensie staje się z nim zjednoczone, wpływa na jego pozostałe składniki a one wpływają na ten pojedynczy element, w znaczeniu chemii i fizyki kwantowej. Jednak gdy opuści mój organizm, to jest nie do odróżnienia od miriadów podobnych struktur. Nie jest mną. Jeśli do mojego oka trafia strumień kwantów odbity od mojej czy cudzej skóry, to jest to strumień odbity od poszczególnych obiektów – molekuł i. zależny od ilości cząsteczek melaniny w komórkach skóry, bardziej jasnej lub bardziej ciemnej.

4. Drogowskaz trzeci: co jest „pod spodem“?

Pamiętam, jak zadziwiła mnie mapa szlaków metabolizmu czyli przemian wszystkich tych obiektów znajdujących się moim organizmie. Wchodzi cukier, a wychodzi dwutlenek węgla, woda i energia zmagazynowana w wiązaniach reszt fosforanowych w nukleotydach. Trzeba się było tego nauczyć w szczegółach. Też był sążnisty egzamin. Kilka takich map mam dotąd w domu. Bywały dołączane do podręczników biochemii. Gąsacz przemian, uporządkowanego ruchu reakcji chemicznych zarządzanego przez katalizatory enzymatyczne. Reakcje, które mogły zajść raz na setki lat, dzięki enzymom zachodzą błyskawicznie i masowo. Nasz organizm jest cały czas w niebywały i zorganizowanym ruchu. Na czym się to opiera? Przychodzi na myśl choćby DNA, ale to tylko swoista pamięć, zasoby pamięci molekularnej organizmu. Taki „dysk twardy“ z danymi. Musi być coś innego, coś, czego w pierwszej chwili NIE WIDĄĆ. Jest to nasze ciało. Rusztowanie, na którym opiera się cała konstrukcja i procesy. Specjalne strukturalne „punkty dostępu“ dla tych wszystkich elementów płynących przez nas w postaci metabolizmu. Struktura i przestrzenne uporządkowanie jest ważne. Gdy ma

assumed that the structure of giant molecules, mainly proteins, provides this structural order, but it is easy to establish that the molecules themselves must rest on something. On what? On our body.

This term comes back and I try to look after and adequately use the term „organism“ so that I do not have to simplify it and use the term „body“. Let's try to define what this „human body“ is. It is a fragment of our being, a fragment of our being that ensures the ordering of all material interactions aimed at our existence. Aristotle would call it material potency, or something that enables physical change, but in a way that this change is happening in us. When various chemical components get inside the body, they act on our body, and it acts on them. They form a whole together according to their nature. In the view of my teacher, Prof. Gogacz, these external separate beings, that is, what comes within us, are entities with individual purposes, something that shapes our complex essence in its physical aspect accordingly. Seen from our side, the „body“ is the basis for change and order, seen from outside the body there are a multitude of atoms, molecules, ions, which all shape their area of our materia in their own way. And they cover our proper body, which, without them, would not exist fully and could not be updated. So what do we see when we look at ourselves (say - at our feet or hands, because one's face is visible only in the mirror)? We see a team of „the flesh“ as a material potency and a multitude of ordered „purposeful entities“ that are BEINGS. In itself, the „body“ is elusive. We recognize them as being indirectly, through our actions. We always see only the whole team: the body + team of causes of our essentia. And seen from the side of these causes – molecules flowing through us.

5. The fourth signpost: we are not the body.

The simplified approach to human existence means that we tend to recognize the autonomy of the „body“ in existence. We believe that this multitude of ordered atoms is simple and that being of itself belongs to itself. Meanwhile: snap and we're gone. The atomic assembly is falling apart, it is swinging around the world, and we are not physically alive. This impermanence

się odbyć jakaś kataliza (przyspieszenie reakcji), to cząsteczki czy atomy (najczęściej jony), które biorą w niej udział muszą zostać specjalnie ustawione, bardziej precyzyjnie, niż w częściach maszyn. Jedynie wtedy, gdy przyłączając się do dużej cząsteczki białka ustawią się odpowiednio - może zachodzić kataliza. To reguła wszelkich katalizatorów. Sugeruje ona (tylko sugeruje!), że musi być jakieś podłożem strukturalne metabolizmu. Rodzaj rusztowania, na którym się ten ruch opiera i jest porządkowany. Przyjęło się sądzić, że to właśnie struktura gigantycznych molekuł, głównie białkowych, zapewnia ten strukturalny porządek, ale łatwo ustalić, że i same molekuły muszą się na czymś opierać. Na czym? Na naszym ciele.

Wraca ten termin, a ja usiłuję pilnować się i adekwatnie używać terminu „organizm“, abym nie musiał od razu upraszczać i używać terminu „ciało“. Spróbujmy wskazać na to czym jest owo „ludzkie ciało“.

Jest fragmentem naszego bytu, fragmentem naszej istoty, który zapewnia uporządkowanie wszelkich oddziaływań materialnych ukierunkowanych na nasz byt. Arystoteles nazwałby je możliwością materialną czyli czymś, co umożliwia zmianę fizyczną, ale w taki sposób, że ta zmiana dzieje się w nas. Gdy w obrębie organizmu dostają się różne chemiczne składniki, to działają na nasze ciało, a ono na nie. Tworzą razem pewną całość stosownie do swej natury. W wersji mojego Mistrza, prof. Gogacza, te zewnętrzne osobne byty czyli to, co w nas wchodzi, to poszczególne przyczyny celowe, coś, co kształtuje odpowiednio naszą złożoną istotę w jej fizycznym aspekcie. Od naszej strony jest „ciało“ jako podłożem zmian i uporządkowania, od strony zewnętrznej ciała jest multum atomów, cząsteczek, jonów, które wszystkie kształtują po swojemu obszar naszej materialności. I zasłaniają sobą nasze właściwe ciało, które zresztą bez nich nie zaistniałoby w pełni i nie mogło się zaktualizować. Co zatem widzimy patrząc na siebie (powiedzmy - na swoją stopę lub rękę, bo buzia widoczna tylko w lustrze)? Widzimy zespół „ciała“ jako możliwości materialnej i mnogość uporządkowanych „przyczyn celowych“, które są SAMODZIELNYMI BYTAMI. Samo w sobie „ciało“ jest nieuchwytnie. Rozpoznajemy je pośrednio poprzez nas-

leads us to the question: Are we just an autonomously existing body? If so, then there are a lot of puzzles. Would we be only ephemera on the ocean of material changes? Something that worked out the same way, took part a little and disappeared. Maybe, maybe...

However, old Aristotle, and later Saint Thomas Aquinas, saw it completely differently. What we consider to be equivalent to our being or „body“ is only a fragment of our being. It is a manifestation of material potency, and this one is a fragment of something greater, which Aristotle called „substance“ (ousia), and what consisted of the essence (form, act, essentia) and potency (fields of changes, updates). In order for the „body“ as potency to be, it must be based on something more powerful, on the being, on the essence of our being, on what is already there. Aristotle called it act, form, soul (entelechya). In any case, he believed that the „body“ has no ontic autonomy. Saint Thomas Aquinas deepened this intuition by pointing to the essential act of existence as the basis of our being. First, there is an act of existence. This makes us real and updates the essence. The essence in turn updates the „body“ as an area of possible changes, possible further updates.

Both Aristotle and Saint Thomas thought that there are two possibilities in a human being, two areas of change: material potency and immaterial potency. Why? Because certain effects of our actions go beyond the material area, e.g. knowledge of the truth, choice of good, love. In order for our intellect to rest on it, it must have an unlimited material foundation. We do not see, we do not feel our immateriality (our „soul“), because material potency is the only bases of direct human knowledge and does not provide it. We never see the spirit, it is only implicitly suggested. But we find in us the effects of the intellect, which are understandable only on the assumption that man possesses an immaterial (spiritual) potency (Aristotle, Peripsyche). So we have this kind of living structure of man:

- first the individual ACT OF EXISTENCE (let us add: created by Self-existence, God)
- - then, “actualised” by him essence (essentia, the form)
- - then two areas of potency - immaterial area (basis of mind) and material („body“)

ze działania jako bytu. Widzimy zawsze i tylko cały zespół: ciało + zespół przyczyn celowych. I to od strony tych przyczyn – przepływających przez nas cząsteczek.

5. Drogowskaz czwarty: nie jesteśmy ciałem. Uproszczone ujęcie ludzkiego bytu sprawia, że mamy skłonność do uznawania autonomii „ciała“ w istnieniu. Uważamy, że ten zespół mnogości uporządkowanych atomów po prostu jest i to bycie należy mu się samo z siebie. Tymczasem: pstryk i już nas nie ma. Zespół atomów rozsypuje się, buja po świecie, a nas cielesnie nie ma. Ta nietrwałość naprowadza nas na pytanie: czy jesteśmy tylko ciałem, autonomicznie istniejącym? Jeśli tak, to pojawia się mnóstwo zagadek. Bylibyśmy tylko efemerydą na oceanie materialnych przemian? Czymś co tak się samo ułożyło, potrafiło troszkę i zniknęło. Może, może...

Jednak stary Arystoteles, a później św. Tomasz z Akwinu widzieli to zupełnie inaczej. To, co uznajemy za równoważne naszemu byciu czyli „ciało“ jest tylko fragmentem naszego bytu. Jest przejawem możliwości materialnej, ta zaś jest fragmentem czegoś większego, co Arystoteles nazywał „substancją“ (ousia), a co składało się z istoty (formy, aktu) i możliwości (pola zmian, aktualizacji). Aby „ciało“ jako możliwość było, musi się opierać na czymś mocniejszym bytowo, na istocie naszego bytu, na tym, co już jest. Arystoteles nazywał to aktem, formą, duszą (entelechią). W każdym razie uważały, że „ciało“ nie ma bytowej autonomii. Pogłębił tę intuicję św. Tomasz wskazując na zasadniczy akt istnienia, jako podstawę naszego bytu. Najpierw jest akt istnienia. On urealnia i aktualizuje istotę. Ona z kolei aktualizuje „ciało“ jako obszar możliwych zmian, możliwych dalszych aktualizacji.

Dodajmy, że zarówno Arystoteles jak i św. Tomasz uważali, że akurat w człowieku są aż dwie możliwości, dwa obszary zmian – możliwość materialna i możliwość niematerialna. Dlaczego? Ponieważ pewne skutki naszego działania wykraczają poza materialny obszar, np. poznanie prawdy, wybór dobra, miłość. Aby nasz intelekt miał się na czym oprzeć musi mieć podłożę nieograniczone materialnie. My nie widzimy, nie odczuwamy naszej niematerialności (naszej „duszy“), bo możliwość materialna jest jedyną



- then, related to our material potency, bands of material purposeful causes, that is, separate material beings that are necessary for our bodily aspect to be formed.

- in turn completely independent living creatures that are part of our body (microbiom).

That's not everything. We also need personal company, for example mom and dad (some claim that we also need pure angel intellects).

Through all of this, we are literally immersed in the entire universe, in all reality, both material and immaterial. However, we can distinguish the exact limits of our being. Some things happens to us and some things do not, although the latter may be a necessary accompaniment for us.

The outlined concept is radically different from the one we are used to, which is based on identifying our corporeality with all our being and giving it the status of autonomy. It arises, lasts, disappears and that's it ... Today we think that we are ONLY a body. We have abandoned the intellectual achievements of our predecessors and have made unacceptable simplifications in describing ourselves. We track down the currents in the nervous system, reducing the work of the intellect ONLY to neurophysiology. We reject the concept of the immaterial intellect. And instead of getting valuable explanations, we multiply puzzles and contradictions. Previous generations inclined to the quoted description, acknowledged the rationality of the „something more“ which underlies human existence. Until the seventeenth century. We brought our existence to the observation of a team of intentional causes included in our body. We've talked about all these atoms and molecules: here I am, here I am. Here and ONLY here. We recognized ourselves as matter. A mistake known as „pars pro toto“ - part instead of the whole.

Therefore, passing - very well- these examinations in biochemistry, biophysics or physiology, would I already have knowledge about a human being? It's rather a mockery. Even if I could keep up with the details of the working of my or someone else's brain, I still would not recognize a man! I would only know the current state of a brain. The hopes of so-called neuroscience are very ambitious. In company with other fields (mammalian ethology, neuropharmacology), it

furtką ludzkiego bezpośredniego poznania i tego nie zapewnia. Nigdy nie widzimy ducha, jedynie o nim wnioskujemy pośrednio. Ale znajdujemy w nas skutki działania intelektu, które są zrozumiałe jedynie przy założeniu posiadania przez człowieka możliwości niematerialnej (duchowej) (Arystoteles, Peri psyche).

Mamy zatem taką oto strukturę bytową człowieka:

- najpierw indywidualny AKT ISTNIENIA (dodajmy: stworzony przez Istnienie Samoistne, Boga)

- następnie urealniona przez niego ISTOTA - FORMA

- następnie dwa obszary możliwości (potencji) - obszar niematerialny (podstawa umysłu) i materialny („ciało“)

- następnie powiązane z naszą możliwością materialną zespoły materialnych przyczyn celowych czyli osobne materialne byty, które są niezbędne, aby ukształtowała się nasza cielesna strona istoty

- z kolei całkowicie samodzielne żywe istoty wchodzące w skład naszego organizmu (biom). To nie wszystko. Potrzebne nam do istnienia jest także osobowe towarzystwo, chociażby mama i tata (niektórzy twierdzą, że również czyste intelekty anielskie).

Poprzez to wszystko jesteśmy dosłownie zanurzeni w całym Wszechświecie, w całej rzeczywistości i materialnej, i niematerialnej. Daje się jednak wyróżnić ścisłe granice naszej bytowości. Coś się na nas składa, a coś nie, chociaż może nam niezbędnie towarzyszyć.

Zarysowana koncepcja jest radykalnie różna od tej, do której przywykliśmy, która opiera się na utożsamieniu naszej cielesności z całym naszym bytem i nadaniu jej statusu autonomii. Powstaje, trwa, zanika i już... My dziś sądzimy, że jesteśmy TYLKO ciałem. Porzuciliśmy cenne osiągnięcia intelektualne Poprzedników i dokonaliśmy niedopuszczalnych uproszczeń w opisie samych siebie. Tropimy wytrwale przebiegi prądów w układzie nerwowym sprowadzając pracę intelektu JEDYNIE do neurofizjologii. Odrzucamy koncepcję niematerialnego intelektu. I zamiast uzyskiwać cenne wyjaśnienia mnożymy zagadki i sprzeczności. Poprzednie pokolenia skłaniały się do przytoczonego opisu, uznawały racjonalność „czegoś

wants to explain man. Well, let them try. I respect the achievements of every field of knowledge, but not when it reduces the person to the body only.

6. The fifth signpost: the peculiarity of the human body - the principle of „commensuratio“. Human material potency or body has an extremely specific characteristic - it constantly and irrevocably cooperates with immaterial potency as the basis of the mind (intellect and will). Thus, on the one hand, it must embrace all purely material elements as a set of intentional causes, as in animals. On the other hand, it must be open to full cooperation with the non-material side of our being. This gives the human body a special character, unique among the living beings. Only man has both material and non-material nature, and his corporeality is an inalienable and necessary element of his being, his nature. To the extent that when we are hit by death, we cease activity of any kind! We still exist because we are an individual act of existence and being with its immateriality, but without the body this structure is immobilized. It is not that after death we are „lighter“ and „freer“. Nothing like it, we are like characters from fairytales turned into stone. Our full structure REQUIRES the body. And it cannot update itself without the help of the mentioned ordered team of purpose reasons. When, as a result of the passage of time or life events, this team fails to keep the principal causes in check - we die. Our home is falling apart, and with it all the possibilities of action. Even our immateriality is constantly dependent on materiality in our actions (though still not in existence). That is why the „body“ is so important to us and we focus on it.

This close and unique connection of the spiritual and physical sphere in man is our distinguishing feature among beings. These spheres are so closely related that if for some reason our spiritual side weakens (e.g. some important personal relationships, relationships with God or people, disappear), then our material potency or body in the proper sense is unable to control the whole team of material, purposeful causes that constantly „envelope“ and designate our body. And they are pushing for ... disorder, and finally death. The team of our material pur-

więcej“, co leży u podłożu ludzkiego bytu. Aż do XVII wieku. My sprowadziliśmy nasze istnienie do obserwacji zespołu przyczyn celowych włączonych w nasz organizm. Powiedzieliśmy o tych wszystkich atomach i częsteczkach: oto ja, tutaj jestem. Tutaj i TYLKO tutaj. Uznaliśmy się za materię. Pomyłka znana jako „pars pro toto“ – część zamiast całości.

Zatem zdając, zresztą bardzo dobrze, owe egzaminy z biochemii, biofizyki czy fizjologii miałbym już wiedzę o człowieku? To raczej kpina. Nawet jeśli byłbym w stanie nadążyć za szczegółami pracy mojego czy cudzego mózgu, to i tak przecież człowieka nie poznałem! Poznałem jedynie aktualny stan jakiegoś mózgu. Nadzieje tzw. neuronauki idą bardzo daleko. Do spółki z innymi dziedzinami (etologią ssaków, neurofarmakologią) chce ona wyjaśnić człowieka. Cóż, niech próbuje. Szanuję osiągnięcia każdej dziedziny wiedzy, ale nie wtedy, kiedy redukuje człowieka tylko do ciała.

6. Drogowskaz piaty: osobliwość ludzkiego ciała - zasada „commensuratio“.

Ludzka możliwość materialna czyli ciało ma wybitnie swoistą cechę - stale i nieodwoalnie współpracuje z możliwością niematerialną jako podstawą umysłu (intelektu i woli). Zatem z jednej strony musi ogarniać wszystkie czysto materialne elementy jako zespół przyczyn celowych, jak u zwierząt. Z drugiej zaś musi być otwarta na pełne współdziałanie z niematerialną stroną naszej istoty. To nadaje ludzkiemu ciała szczególny charakter, unikalny wśród ożywionych bytów. Tylko człowiek ma naturę zarazem materialną i niematerialną, a jego cielesność stanowi niezbywalny i konieczny element jego istoty, jego natury. Do tego stopnia, że gdy dotknie nas śmierć to przestajemy w jakikolwiek sposób działać! Nadal istnujemy, bo stanowi nas indywidualny akt istnienia i istota z jej możliwością niematerialną, ale bez ciała ta struktura jest unieruchomiona. To nie jest tak, że po śmierci jesteśmy „lżejsi“ i „swobodniejsi“. Nic podobnego, jesteśmy jak postacie z bajek zamienione w kamień. Nasza pełna struktura WYMAGA ciała. A ono bez pomocy wspomnianego uporządkowanego zespołu przyczyn celowych nie może się zaktualizować. Gdy w wyniku upływu czasu lub wydarzeń życiowych

poseful causes goes its own way, our body does not order it anymore. The integrated movement of atoms and molecules disintegrates. Some life processes are still going on, but the molecules of the team of purposeful causes achieve autonomy and eventually leave our living area. Man remains, only as long as the act of existence and subordinate to it, a being built only from immaterial potency (called spiritual). The body in the strict sense does NOT exist. They are then corpses, full of disintegrated processes. Of course, in our structure, due to this principle of strict and natural adjustment, there remains a call to materiality, like a longing for immortality, for completeness and power of action. From this longing, Saint Thomas derived the conjecture of resurrection. Our spirit demands the body so much that it is natural to rebuild it. But we cannot rebuild ourselves, it cannot be done by „a team of intentional causes“, which is what we usually consider to be the body - all atoms and molecules present in us (and maybe even elementary particles if we go down below). This set of separate material entities without a body or material potency is crumbling. Each element goes its own way. „Ashes to ashes and dust to dust...“

The angle of Christian theology adds something important here. It is argued that the initial state of the human being was immortality, and only breaking the relationship with God (sin) weakened our existence so much that we are already heading for death from the very beginning of our existence. We are aging from the mother's womb. Biology investigates this process and talks about the shortening of telomeres in our chromosomes as a biological clock. When I take tablets of metformin for my diabetes, I am supposedly slowing down this process, I am rejuvenating myself chromosomally. But that's irrelevant. We have lost the power to resist the pressure of the material world, this team of purposeful causes constantly present in us. At some point, this pressure will kill us. The crisis of love, in this case of a man for God, introduces a depressing situation of this kind. But we have a promise that our existence will be rebuilt and will be stronger, lasting. Therefore, it is neither true that what we observe in ourselves is original and completely natural (because the present

nie daje się utrzymać tego zespołu przyczyn celowych w ryzach - umieramy. Rozpada się nasz dom cielesny, a wraz z nim wszelkie możliwości działania. Nawet nasza niematerialność jest stale zależna od materialności w swym działaniu (choć nadal nie w istnieniu). Dlatego „ciało“ jest dla nas tak ważne i tak się na nim skupiamy. Ta ścisła i unikalna łączność sfery duchowej i cielesnej w człowieka stanowi nasz wyróżnik wśród bytów. Sfery te tak bardzo są powiązane, że jeśli z jakichś względów słabnie nasza strona duchowa (np. zanikają jakieś ważne relacje osobowe, relacje z Bogiem czy z ludźmi), to nasza możliwość materialna czyli ciało we właściwym sensie nie jest w stanie zapanować nad całym zespołem materialnych przyczyn celowych, które nieustannie nasze ciało „otulają“ i wyznaczają. I naciskają na nie... Wdziera się nieporządek, zaburzenia, a w końcu śmierć. Zespół naszych materialnych przyczyn celowych idzie własną drogą, nasze ciało już go nie porząduje. Zintegrowany ruch atomów i cząsteczek rozpada się. Nadal toczą się pewne procesy życiowe, ale molekuły zespołu przyczyn celowych osiągają autonomię i w końcu opuszczają nasz obszar bytowy. Z człowieka pozostaje (tylko lub aż) akt istnienia i podległa mu istota zbudowana jedynie z możliwości niematerialnej (zwanej duchową). Ciała w ścisłym sensie już NIE MA. Są zwłoki, pełne zdezintegrowanych procesów. Oczywiście w naszej strukturze z powodu owej zasady ścisłego i naturalnego dopasowania pozostaje wezwanie do materialności, jakby tęsknota za nieśmiertelnością, za kompletnością i mocą działania. Z tej tęsknoty św. Tomasz wywiódł sugestię zmartwychwstania. Nasz duch tak bardzo domaga się ciała, że jest naturalne jego odbudowanie. Lecz sami nie możemy się odbudować, nie może też tego sprawić „zespół przyczyn celowych“ czyli to, co zazwyczaj za ciało uważamy. Wszystkie obecne w nas atomy i cząsteczki (a może nawet cząstki elementarne, jeśli jezdziemy niżej). Ten komplet osobnych materialnych bytów bez ciała czyli owej możliwości materialnej rozsypuje się. Każdy element idzie swoją drogą. „Z prochu powstałeś i w proch się obrócisz...“

Spojrzenie teologii chrześcijańskiej dodaje tu coś ważnego. Twierdzi się, że ludzki punkt wyjścia był NA POCZĄTKU nieśmiertelny i

body is mortal, material potency disappears, and it was not so „at first“), nor that what will come into being after the rebuilding of the body will be identical with the present state. It will be better, because it is immortal. It's a different, ideal bodily form.

7. Psychological and pedagogical conclusions.
The contemporary, imperfect understanding of human corporeality (and the entire human being) places us under constant oppression. If we were only a body, it would be an unceasing and inevitable cause for despair. Despair is the belief that for some reason love is impossible. And the corpse does not love and cannot love. It simply does NOT exist in this configuration. We consciously or unknowingly accept this conclusion (a false conclusion, but that is a different story) and we fall into despair. We hide it in various ways, we fight with fear of nothingness, but the worst is that all our most sacred and important relations become literally nothing ... This fire cannot be extinguished if we do not recognize the true nature of man as a being on the road, towards ultimate change, to eternity ... This is a very serious matter. We are facing the ultimate things. In their light, everything that takes place on the stage of our being, including our body, is so essential. The effects of certain decisions may remain with us forever.

References

- Gogacz M., Elementarz metafizyki, Wyd. Navo, Warszawa, 2008.
- Milcarek P. Teoria ciała ludzkiego w pismach św. Tomasza z Akwinu, Oficyna Wydawniczo – Poligraficzna, Warszawa, 1994.
- Wojcieszek K., Ewolucja biologiczna jako pamięć wydarzeń? Konsekwencje dla życia społecznego, [w:] Olga Kołakowska, Rafał Krajzewicz, Marcin Trepczyński (red.), Pamięć w dobie Internetu, Wyd. Campidoglio, Warszawa, 2011.

dopiero zerwanie więzi z Bogiem (grzech) na tyle osłabiło nasz byt, że od samego początku naszego zaistnienia już zmierzamy ku śmierci. Starzejemy się od łona matki. Biologia bada ten proces i mówi o skracaniu się telomerów w naszych chromosomach jako biologicznym zegarze. Gdy łykam tabletki metforminy na moją cukrzycę podobno spowalnia ten proces, odmładzam się chromosomalnie. Ale to nieistotne. Utraciliśmy moc stawiania oporu naporowi materialnego świata, tego zespołu przyczyn celowych stale w nas obecnych. W jakimś momencie ten nacisk nas zabije. Kryzys miłości, w tym wypadku człowieka do Boga, wprowadza taką deprymującą sytuację. Ale mamy obietnicę odbudowy naszego bytu i to silniejszego, trwałego. Zatem ani to, co w sobie obserwujemy nie jest pierwotne i do końca naturalne (bo obecne ciało jest śmiertelne, możliwość materialna zanika, a nie było takie „na początku“), ani to co będzie po odbudowaniu ciała nie będzie tożsame z obecnym stanem. Będzie lepsze, bo już nieśmiertelne. To inna, docelowa postać ciała.

7. Wnioski psychologiczno-pedagogiczne.
Współczesne, niedoskonałe rozumienie ludzkiej cielesności (i całego ludzkiego bytu) sprawadza na nas pewne stałe przekleństwo. Jeśli bylibyśmy jedynie ciałem, to byłby to konsekwentny i nieuchronny powód do rozpaczliwego. Rozpacza to przekonanie, że z jakichś powodów miłość jest niemożliwa. A trup nie kocha i kochać nie może. Po prostu w takiej konfiguracji nas NIE MA. Świadomie czy nieświadomie rozpoznajemy ten wniosek (fałszywy wniosek, ale to inna opowieść) i popadamy w rozpacz. Ukrywamy ją na rozmaite sposoby, walczymy z lękiem przed nicością, ale najgorsze jest to, że wszelkie nasze najbliższe i najważniejsze relacje stają się dosłownie niczym.... Tego pożaru nie da się ugasić, jeśli nie rozpoznamy prawdziwej natury człowieka jako bytu w drodze, ku ostatecznej przemianie, ku wieczności...
To bardzo poważna sprawa. Stajemy wobec rzeczy ostatecznych. W ich świetle wszystko, co się rozgrywa na scenie naszego bytu, w tym naszego ciała, ma tak zasadnicze znaczenie. Skutki pewnych rozstrzygnięć mogą bowiem pozostać z nami na zawsze.



Janet Warren (Canada)

Comment to “The Invisible Body”

Even before reading this article, Dr. Wojcieszek’s title captured my attention. The concept of the “invisible body” relates to almost all of my scholarly interests: general science, medicine, psychology, psychotherapy, and theology. Wojcieszek offers a fascinating commentary on the unique, transient, and temporal nature of what we call our bodies. Something so commonplace, indeed unavoidable, that we seldom ponder this marvel of God’s creation. Even though we “know” ourselves, there is so much that is unknown. Contemporary science, especially quantum physics, suggests that existence is difficult to define. Subatomic particles have a quasi-real ontological status. Force fields, black holes, and dark matter remain invisible but can be inferred from their impact on the visible. Scientists are also increasingly noting the interconnectedness of all things (quantum entanglement being a prime example), and recognize the limits of their study. Of course, one must be careful about concluding or applying too much from science.

The same caution applies to biological science; e.g., not all atoms in our bodies are replaced, the life span of cells is variable. Nonetheless, as Wojcieszek notes, much of human physiology is in flux. The microbiome, estimated to constitute fifty percent of our bodies, is a leading area of current medical research. I still remember the first electron-microscope image I saw of human eyelashes – crawling with creepy things! Other “invisible” and unknown aspects of the human body include our awareness and control of it. Most of the time our bodies function well without us even being conscious of them. Pain indicates a problem, but there is much variation in people’s perception of pain; sometimes pain occurs when there is no obvious physical ailment. Mental and physical are intertwined – injuries and illnesses can cause psychological problems, and mental illnesses often have

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physical manifestations. Medical practitioners teach people to care for their bodies, but at times people have no control over their bodies, such as with a seizure disorder. Our bodies can also be controlled (abused actually) – by others or the environment. Sometimes intentionally, often accidentally. Indeed, given the fragility of life, it is surprising and marvelous that so many people survive and flourish.

Exceptional cases raise further physiological and philosophical questions about the nature of the “invisible” body. Organ transplants – whose “body” do they belong to? Conjoined twins – whose body is it? One person or two? People in comas – is the self in the brain or the body? Near-death and out-of-body experiences – what is real? Indeed the literature on the relationship between body and soul, or mind and brain, or material and non-material realities continues

to expand, but without definitive conclusions or consensus. Technical investigations, such as neural localization studies that show brain changes correlated with prayer, add further dimensions but still do not solve the basic dilemma. Our “invisible” bodies are clearly more than the sum of their parts.

From a psychological perspective, the “invisible body” relates to issues of identity discussed in the previous issue of the EMCAPP journal. There are challenges of definition, and social, developmental, and religious aspects to this. How one perceives and presents their body is shaped by psychological and cultural factors. Traumatized people may have dissociated identities, or disintegrated selves. People with shame desire to be invisible. The internet, even though plagued with “selfies,” also allows some degree of invisibility. Some people inflict pain on their bodies in order to feel. Newer trauma therapies note the importance of engaging the body in the recovery process (somatic therapies). We teach mindfulness to help people be more connected to their bodies and selves, which can then help with connection to others and God. The good news, as Wojcieszek notes, is that we are not our bodies – biology is not destiny. We can change both our bodies and our perception of them. However, we are embodied beings, with some sort of invisible soul and/or spirit. From a Christian perspective, we are created in the image of God, promised everlasting life, and even new bodies. Theological questions of origins, teleology, and ultimacy add more dimensions to the concept of the “invisible body.” What happens at death? What is unique about the human body? Our awareness of it? Our capacity for reflecting and relating to our Creator?

It is impossible to do justice the complexity of the theology or the science on the multidimensional concept of the invisible body, but it is a concept worthy of consideration. I thank Dr. Wojcieszek for stretching the bounds of imagination, and providing renewed appreciation for the wonders of the human body and its Creator. In contemplating our created bodies, we need continual humility and acceptance of mystery. And we must never forget the invisible one who created them, is present in them, and holds them together.

He is the image of the invisible God, the first-born of all creation; for in him all things in heaven and on earth were created, things visible and invisible, whether thrones or dominions or rulers or powers—all things have been created through him and for him. He himself is before all things, and in him all things hold together. (Col 1: 15–17)

References:

- Boleyn-Fitzgerald, Miriam. *Pictures of the Mind: What the New Neuroscience tells us about who we are*. Upper Saddle River, NJ: Pearson Education, FT Press, 2010.
- Dickerson, Matthew. *The Mind and the Machine: What it means to be Human and why it Matters*. Grand Rapids: Brazos, 2011.
- Green, Joel B. and Stuart L. Palmer (eds.) *In Search of the Soul: Four Views of the Mind-Body Problem*. Downers Grove: IVP, 2005.
- Jeeves, Malcolm (ed.) *Rethinking Human Nature: A Multidisciplinary Approach*. Grand Rapids: Eerdmans, 2011.
- Peterson, James C. *Changing Human Nature: Ecology, Ethics, Genes and God*. Grand Rapids: Eerdmans, 2010



Jason Dy (Philippines) In Loving Memory

A key part of this installation are empty bottles that could be filled by the visitors of the Arte+Faith exhibition at the Catholic World Youth Days in Madrid (15-21 August, 2011) with memories of their beloved dead using any mementos they have brought with them. Paper and pen are provided to fill in: In loving memory of _____.

Next to these bottles stand cast polyresin statues of angels molded from an old and worn-out statue of an angel with broken wings I salvaged from a demolished cemetery in the Philippines. Afterwards it was turned into a housing complex for the poor near our parish. Each statue will be covered with envelopes with intentions for the dead.

On a shelf on the wall I have put several bottles in loving memory of these following groups:
1. Those unknown to human beings but known to God

2. Victims of child abuse and exploitation
3. Victims of natural calamities (flood, tsunami, earthquake)
4. Victims of war and conflict
5. Victims of famine and sickness
6. Modern-day saints and heroes (John Paul II, Mother Teresa, et al.)

The installation finds its origin in the devotional practice of faithful Catholics to remember their departed loved ones, which takes place on November 2 on the feast of All Souls Day. As Catholic believers we believe in the communion of the living and the dead, which means that we pray for each other. For me as a Jesuit priest it indicates that I offer the mass to God as an act of devotion and prayer for both the living and the dead. For me as an artist the installation provided a venue to investigate how this form of art interacts with a Christian devotional practice. It also probed into the potential of employing art in ministry, whereby art does not only display a beautiful form but also becomes an image that opens a window for spiritual encounter and enrichment. I hope the bottled memories will provide people with an opportunity for catharsis, a venue for reliving memories and for keeping the legacy of the dead alive.

May we all be comforted by the words of the Irish funeral prayer 'Longing for One More Day': 'When we lose someone we love it seems that time stands still. What moves through us is a silence... a quiet sadness... a longing for one more day... one more word... one more touch. We may not understand why you left this earth so soon or why you left before we were ready to say good-bye, but little by little, we begin to remember not just that you died, but that you lived. And that your life gave us memories too beautiful to forget. We will see you again some day, in a heavenly place where there is no parting. A place where there are no words that mean good-bye.'

Transhumanism – the Great Danger? How far are we allowed to go in biological and technological improvements to mankind?

The Catholic theologian Johannes Grössl (Germany) in conversation with Werner May.

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Transhumanismus – die große Gefahr? Wie weit dürfen wir bei der biologischen und technologischen Verbesserung des Menschen gehen?

Der katholische Theologe Johannes Grössl (Deutschland) im Gespräch mit Werner May

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Many thanks, Johannes, for taking part in this interview. What you have written on our topic shows me that your attitude to transhumanism is not simply one of rejection. But, before we move on to discuss the pro and contra, it would certainly be helpful if you could outline for us how we are to understand the term transhumanism.

Johannes: Transhumanists want to make fundamental improvements to the human being with the help of new technologies. The aim is to trans-cend, i.e. go beyond or overcome, the natural limitations of human nature. This inclu-

Vielen Dank, Johannes, für die Bereitschaft zu diesem Interview. Die Lektüre deiner Literatur zu unserem Thema hat mir gezeigt, dass du dem Transhumanismus nicht nur ablehnend gegenüberstehst. Aber, bevor wir darauf zu sprechen kommen, was dafür und dagegen spricht, ist es sicher hilfreich, wenn du uns bitte darlegen würdest, was man unter Transhumanismus zu verstehen hat.

Johannes: Transhumanisten möchten den Menschen mithilfe neuer Technologien grundlegend verbessern. Natürliche Begrenzungen der

des a great variety of measures with the goal of achieving longer life, developing resistance to disease, improving performance by means of cybernetic implants or genetic modifications, or even creating completely new abilities.

That brings to mind the thought that transhumanism is not really so new. Take our normal eyeglasses, for example, which for many centuries were of course not available, but to which we have all accustomed ourselves.

Johannes: Yes, at all times there have been people intent on improving their own life situation as well as that of their descendants and of the society in which they lived. That is the basis of advances in culture, technology and morality. Yet there is an important difference between the established methods and what the transhumanists are demanding. Eyeglasses compensate for a disadvantage which some persons – namely those with weaker eyes – have compared to other persons. It does indeed improve the situation of the individual, but only up to a level which other people have attained naturally. Furthermore, one can remove the eyeglasses at any time. We would be dealing with something completely different if cybernetic eyes irreversibly replaced our normal eyes and also allowed us to see at night or in the UV spectrum. Or if we were able to alter the genes of fertilised eggs in such a way that superhuman vision could be achieved in a natural way.

The keyword genes reminds me, of course, of the report from China, which appeared in all the news channels, saying that genetic interventions had been carried out in fertilised embryos to prevent certain diseases, or at least to increase resistance to them. From there, it seems to me, it will no longer be far to the point at which we will be able not only to improve the body's resistance, but also to advance its potential performance.

Johannes: That is where we will end up. One does not even need the sophisticated CRISPR/Cas9 procedure which was used by He Jiankui and with which he could make highly precise changes in individual genes. I must suppose – unfortunately – that it will become established

menschlichen Natur sollen trans-zendiert, also überschritten oder überwunden werden. Dazu gehören ganz unterschiedliche Maßnahmen: Die Lebensdauer soll erhöht werden, Resistenzen gegenüber Krankheiten sollen entwickelt werden, kybernetische Implantate oder genetische Veränderungen sollen uns leistungsfähiger machen oder uns sogar neue ganz neue Fähigkeiten zukommen lassen.

Das bringt mich auf den Gedanken, dass der Transhumanismus doch gar nicht so neu ist. Nehmen wir zum Beispiel einfach ganz normal unsere Brille her, die es ja Jahrhunderte auch nicht gegeben hat, aber an die wir uns doch alle schon gewöhnt haben.

Johannes: Ja, schon immer waren Menschen darauf bedacht, ihre eigene Lebenssituation, die ihrer Nachkommen und der Gesellschaft, in der sie leben, zu verbessern. Darauf gründet kultureller, technologischer und moralischer Fortschritt. Doch gibt es einen wichtigen Unterschied zwischen den etablierten Methoden und dem, was die Transhumanisten fordern. Die Brille gleicht einen Nachteil aus, den manche – eben diejenigen mit schlechteren Augen – gegenüber anderen Menschen haben. Sie verbessert zwar die Situation des Individuums, doch nur auf ein Niveau, das ein Teil der Menschen natürlicherweise besitzt. Außerdem kann man die Brille jederzeit abnehmen.

Ganz anders verhielte es sich, wenn kybernetische Augen unsere regulären Augen irreversibel ersetzen und uns auch in der Nacht oder im UV-Bereich sehen lassen würden. Oder, wenn wir die Gene von befruchteten Eizellen so verändern könnten, dass sich übermenschliche Sehfähigkeiten auf natürlichem Wege entwickeln würden.

Das Stichwort Gene erinnert mich natürlich sofort an die kürzlich in allen Nachrichten zu findende Meldung aus China, dass dort an befruchteten Embryonen genetische Eingriffe vorgenommen wurden, um gewissen Krankheiten vorzubeugen bzw. die Widerstandsfähigkeit zu fördern. Da scheint mir der Weg nicht mehr weit zu sein, nicht nur die körperliche Resistenz zu fördern, sondern auch das Leistungsvermögen.



practice to improve mankind by “separating out” less capable persons. In Germany, we have now reached the stage that health insurers take over the costs for non-invasive pre-natal tests. Using these tests, it is possible to identify trisomy 21 (Down’s syndrome) as early as the ninth week of pregnancy; over 90% of the identifications lead to a voluntary termination of the pregnancy.

With the help of polygenic analysis, it is possible to deduce from the DNA of embryos the probable characteristics of almost every physical and mental trait. This includes, as the geneticist Robert Plomin has shown, whether the child will in all probability have an above or below average intelligence, whether it will tend to suffer from depression, and whether it will have an inclination towards aggression, obesity or addiction.

The human being is exposed to societal mechanisms. I have two questions on this. One is: what form do these societal mechanisms take? Secondly: if we look at the area of doping, for example, we do in fact see a unified response worldwide in favour of banning it, even if this is not always successful.

Johannes: In a liberal society, it will be difficult to ban these new technologies. On the one hand, a ban will lead people to turn to other countries or to illegal activities, as was the case with pregnancy terminations before the relevant penalties were abolished. One should not underestimate the desire of parents to ensure that their own children have the best chances in life. On the other hand, it is doubtful that we could apply the same standards as with doping: what do we do with children who were not even involved in the choice to improve their DNA? Do we really wish to exclude from the labour market, or even from public life, all persons who have improved themselves genetically or technologically?

What effects, then, could such improvements have on working life?

Persons with improved stamina or intelligence will on average perform better. This leads to distortion in competition: firms which employ

Johannes: Darauf wird es hinauslaufen. Man benötigt nicht einmal das anspruchsvolle CRISPR/Cas9-Verfahren, das von He Jiankui angewandt wurde und mit dem er einzelne Gene zielgenau verändern konnte. Ich gehe – leider – davon aus, dass sich die Verbesserung von Menschen durch „Aussortierung“ von weniger leistungsfähigen Menschen durchsetzt. In Deutschland sind wir mittlerweile so weit, dass die Krankenkassen die Kosten für nicht-invasive Pränataltests übernehmen, mit denen bereits in der 9. Schwangerschaftswoche eine Trisomie 21 (Down-Syndrom) nachgewiesen werden kann; über 90% der erkannten Fälle führen zu einem freiwilligen Abbruch der Schwangerschaft.

Mithilfe der polygenen Analyse können aus der DNA von Embryos aber auch Rückschlüsse auf die Wahrscheinlichkeit der Ausprägung fast jeder physischen und psychischen Eigenschaft gezogen werden. Dazu gehört auch, wie der Genetiker Robert Plomin feststellt, ob das Kind mit hoher Wahrscheinlichkeit unter- oder überdurchschnittlich intelligent wird, ob es eher an Depressionen leiden wird, ob es eher zu Aggression, Fettleibigkeit oder Suchtverhalten neigen wird.

Der Mensch ist gesellschaftlichen Mechanismen ausgesetzt. Da hätte ich zwei Fragen. Die eine wäre, welche Gesichter können diese gesellschaftlichen Mechanismen tragen? Und zweitens, beim Thema Doping können wir zum Beispiel doch sehen, wie es zu einer weltweiten Einheit gekommen ist, dieses zu verbieten, auch wenn es nicht immer gelingt.

Johannes: In einer liberalen Gesellschaft wird es schwierig, diese neuen Technologien zu verbieten. Einerseits werden bei einem Verbot die Menschen auf andere Länder oder illegale Angebote ausweichen, so wie dies im Fall von Schwangerschaftsabbrüchen vor der Einführung einer Straffreiheit der Fall war. Man darf den Wunsch von Eltern nicht unterschätzen, den eigenen Kindern die besten Chancen im Leben zukommen zu lassen. Andererseits ist es fraglich, ob wir gleiche Maßstäbe wie beim Doping anlegen können: Wie gehen wir mit Kindern um, welche die Verbesserung ihrer DNA

improved human beings will produce more efficiently; improved individuals will rise more quickly within the hierarchies. This will place enormous pressure to adapt on those who rely purely on their natural abilities.

If this is the case, how are we going to react to this development?

Since there will probably be no way of holding back transhumanist development, my plea is that we should accompany it ethically and politically. It will in fact be necessary to set limits as to which improvements are morally acceptable or not, and these limits have to be agreed on by society. Church and theology should also make a contribution here. Politically, this development must be accompanied in such a way as to minimise the danger that transhumanism might lead to a deep split in society. In a capitalist system, it would initially be only the rich who could afford to improve their intelligence, health and performance capability. The gulf between rich and poor would become even wider. The state should therefore make the morally permissible improvements available to all, especially those starting with disadvantages anyway. It will be very difficult, however, to implement such standards globally.

Why do you believe that no worldwide standards will be agreed?

Johannes: We have not even been able to implement fundamental aspects of human rights worldwide, let alone solve the climate crisis. Technology is advancing so quickly that politicians often only react instead of shaping developments. Besides that, there are countries in the world for which I must assume that they will use every possible technology to strengthen their military and economic pre-eminence without concern for the consequences in terms of human rights. We too will find ourselves forced to respond in the economic field: if a society is successful in raising the average intelligence of its members significantly, it will take a dominating market position in an ever-increasing number of areas. All who do not participate in this development will lose out – unless there is

nicht einmal selbst gewählt haben? Wollen wir tatsächlich alle Menschen, die sich genetisch oder technologisch verbessern haben lassen, vom Arbeitsmarkt oder gar der Öffentlichkeit ausschließen?

Welche Auswirkungen können denn solche Verbesserung für das Arbeitsleben haben?

Menschen mit verbesserter Ausdauer oder Intelligenz können durchschnittlich mehr Leistung erbringen. Dies führt zu einer Wettbewerbsverzerrung: Firmen, die verbesserte Menschen beschäftigen, produzieren effizienter; Verbesserte Individuen steigen schneller in Hierarchien auf. Dies führt zu einem enormen Anpassungsdruck für diejenigen, die nur auf ihre natürlichen Fähigkeiten vertrauen.

Wie sollten wir mit dieser Entwicklung dann umgehen?

Da die transhumanistische Entwicklung wahrscheinlich nicht aufgehalten werden kann, plädiere ich dafür, sie ethisch und politisch zu begleiten. Es müssen tatsächlich Grenzen gezogen werden, welche Verbesserungen moralisch zulässig sind und welche nicht, und diese Grenzen müssen gesellschaftlich ausgehandelt werden. Hier sollten sich auch Kirche und Theologie einbringen. Politisch muss diese Entwicklung dahingehend begleitet werden, dass die Gefahr eingedämmt wird, dass der Transhumanismus zu einer tiefen Spaltung der Gesellschaft führt. In einem kapitalistischen System würden sich nämlich zunächst nur die Reichen leisten können, ihre Intelligenz, Gesundheit und Leistungsfähigkeit zu verbessern. Die Schere zwischen Arm und Reich würde noch weiter auseinandergehen. Daher sollte der Staat die moralisch erlaubten Verbesserungen auch allen zugänglich machen, insbesondere den von vornherein Benachteiligten. Es wird aber sehr schwierig, solche Standards global umzusetzen.

Warum glaubst du, dass es zu keinen weltweiten Standards kommen wird?

Johannes: Wir schaffen es nicht einmal, grundlegende Aspekte der Menschenrechte weltweit

a widespread refusal to trade with all countries which do not adhere to global standards.

Now it would be good for us to talk about a Christian view of the whole matter under the aspects of Christian ethics and anthropology.

Johannes: An important question concerns the standards we wish to, and ought to, apply in setting limits for a transhumanist agenda. Christianity sees in the human being a free moral subject called to, and equipped for, a loving relationship with his fellow man and with God. All steps which endanger these essential characteristics of man are, from a Christian point of view, to be rejected. It should therefore not be permissible to deprive a person of free will by the use of technological implants or to manipulate him/her in any other way.

Yet even more important, it seems to me, is the fact that human beings are, and continue to be, morally responsible for their own actions. Moral improvements, however, do not result from programming our character. The core feature of true virtue is always that one has cooperated voluntarily in the formation of one's character – and that one could at the same time have decided, at some point in the process, in favour of a negative development. I am still uncertain about the question of whether it is permissible for, or even incumbent upon, Christians to use technologies deliberately for the purpose of overcoming negative inclinations, strengthening their wills, and developing a good character.

Perhaps a virtue gained from life experience might have a different quality from one gained by technical improvement?

Johannes: It is certainly more laudable to achieve a certain goal by a hard battle and overcoming many difficulties than simply by pressing a button or swallowing a pill. If, with God's help, I continually direct my will towards the good, it will in the end still be my own will that is left within me and with which I will face God. An intervention from outside, in contrast, destroys my will and replaces it by another – even if this intervention takes place with my consent. This is then also an explanation of why God does not simply impart perfect virtue to believers in answer to their prayers.

durchzusetzen, geschweige denn das Klimaproblem zu lösen. Die technologische Entwicklung geht so rasch voran, dass die Politik häufig nur reagiert, anstatt die Entwicklung mitzugestalten. Außerdem gibt es Länder auf der Welt, bei denen ich davon ausgehe, dass sie jede mögliche Technologie nutzen werden, um ihre militärische und wirtschaftliche Vormachtstellung auszubauen, ohne dabei auf die Einhaltung von Menschenrechten zu achten. Hier werden auch wir in einen wirtschaftlichen Zugzwang kommen: Wenn eine Gesellschaft es schafft, die durchschnittliche Intelligenz ihrer Mitglieder signifikant zu erhöhen, wird sie in immer mehr Bereichen eine marktbeherrschende Stellung einnehmen. Alle, die sich dieser Entwicklung verschließen, werden verlieren – außer, man weigert sich, mit allen Ländern Handel zu treiben, die sich nicht an globale Standards halten. Nun sollten wir auf die christliche Sicht des Ganzen zu sprechen kommen unter den Aspekten einer christlichen Ethik und Anthropologie. Johannes: Eine wichtige Frage ist, nach welchen Maßstäben wir die Grenzen für eine transhumanistische Agenda setzen wollen und sollten. Das Christentum sieht im Menschen ein freies, moralisches Subjekt, das zu einer liebenden Beziehung mit seinen Mitmenschen und mit Gott berufen und befähigt ist. Alle Maßnahmen, welche diese Wesenseigenschaften des Menschen gefährden, sind aus christlicher Sicht abzulehnen. Es sollte daher nicht erlaubt sein, den Menschen durch technologische Implantate den freien Willen zu nehmen oder auf andere Weise zu manipulieren.

Noch wichtiger erscheint mir aber, dass Menschen für ihre eigenen Handlungen moralisch verantwortlich sind und bleiben. Morale Verbesserung geschieht aber nicht durch eine Programmierung unseres Charakters. Echte Tugend besteht immer darin, dass man selbst durch freien Willensentscheid an der Bildung des Charakters mitgewirkt hat – und sich dabei aber auch für eine negative Entwicklung entscheiden hätte können. Unsicher bin ich noch bei der Frage, ob Christinnen und Christen Technologien freiwillig dafür nutzen dürfen oder gar sollten, negative Neigungen zu überwinden, ihren Willen zu stärken und einen guten Charakter zu entwickeln.

At the same time, however, we have a responsibility to mitigate suffering wherever the suffering is unnecessary, and in doing so to make use of any technologies available to us. But the human being should only be improved where an external improvement is accompanied by a possible inner improvement, that is, a strengthening of the character and of the relationship with God. For example, persons whose tendency towards aggression, depression or addiction is far above average could be helped in this way.

It must be doubted, of course, whether a majority could be found in society for the Christian view of transhumanism. But it is not only in Christianity that man's status as a moral subject is seen as an essential attribute: it is also a central tenet of the philosophical tradition of the early Enlightenment, on which our fundamental Western values are based.

My impression is that you would like to see increased public discussion of this topic because there will be no way of preventing transhumanism emerging (?). Is this indeed the case, and what then should be discussed?

Johannes: We should make ourselves aware not only of the dangers of transhumanism, but also of the opportunities it offers. We can overcome many illnesses, we can enjoy longer lives with less physical frailty, we can be more efficient, peaceful and happy. Because of these numerous potential benefits, the development will be unstoppable. At the same time, it forces us once again to ask the old philosophical question about the essence of human nature. Only those with a concept of this essence can stipulate criteria for when essential characteristics should be improved and when they are in danger of being destroyed. A wide-ranging public discourse on the matter will help us to take advantage of the opportunities mentioned and at the same time to limit the risks as much as possible.

Könnte es nicht sein, dass eine durchs Leben erlangene Tugend einen anderen Wert besitzt als eine technisch verbesserte?

Johannes: Es ist auf jeden Fall lobenswerter, ein bestimmtes Ziel durch einen harten Kampf und viel Überwindung zu erreichen, als einfach durch Knopfdruck oder durch das Schlucken einer Pille. Wenn ich meinen Willen sukzessiv und mit Gottes Hilfe auf das Gute ausrichte, dann ist es am Ende immer noch mein eigener Wille, der mir bleibt und mit dem ich Gott gegenüberstrete. Ein Eingriff von außen zerstört hingegen meinen Willen und ersetzt ihn durch einen anderen – selbst wenn dieser Eingriff freiwillig geschieht. So lässt sich auch erklären, warum Gott den Gläubigen nicht einfach die perfekte Tugend als Antwort auf ihre Gebete schenkt.

Gleichzeitig haben wir aber die moralische Verantwortung, Leiden dort zu mindern, wo es unnötig ist, auch unter Zuhilfenahme der uns zur Verfügung stehenden Technologien. Der Mensch sollte aber nur dort verbessert werden, wo eine äußere Verbesserung auch mit einer möglichen inneren Verbesserung einhergeht, also einer Stärkung des Charakters und der Gottesbeziehung. Zum Beispiel könnte man Menschen mit weit überdurchschnittlicher Aggressivität, Depressivität oder Suchtpotential auf diese Weise helfen.

Ob die christliche Perspektive auf den Transhumanismus in einer säkularen Gesellschaft mehrheitsfähig ist, bleibt natürlich fraglich. Dass zum Wesen des Menschen auch sein Status als moralisches Subjekt gehört, ist aber nicht nur dem Christentum eigen, sondern auch eine zentrale Annahme der philosophischen Tradition der frühen Aufklärung, in der unser westliches Wertefundament gründet.

Ich höre heraus, dass du unser Thema verstärkt öffentlich diskutiert haben möchtest, weil der Transhumanismus nicht aufzuhalten sein wird. Ist das wirklich so und was sollte dabei diskutiert werden?

Johannes: Wir sollten neben den Gefahren auch die Chancen des Transhumanismus wahrnehmen. Wir können viele Krankheiten überwin-

References

- Göcke, B. & Meier-Hamidi, F. (2018), Designobjekt Mensch. Die Agenda des Transhumanismus auf dem Prüfstand, Freiburg: Herder.
- Cole-Turner, R. (2006): "Biotechnology and the Religion-Science Discussion," in: Clayton, P. & Simpson, Z., The Oxford Handbook of Religion and Science, New York: Oxford University Press, 929-944.
- Conley, D. & Fletcher, J. (2017): The Genome Factor What the Social Genomics Revolution Reveals about Ourselves, Our History, and the Future, Princeton University Press.
- Hamer, D. (2005): The God Gene: How Faith Is Hardwired Into Our Genes, New York: Anchor Books.
- Persson, I. & Savulescu, J. (2012): Unfit for the Future: The Need for Moral Enhancement. Oxford University Press.
- Plomin, R. (2018): Blueprint: How DNA Makes Us Who We Are, Milton Keynes: Random House.

den, älter und weniger gebrechlich werden, effizienter, friedvoller und glücklicher. Aufgrund dieser vielen Chancen wird die Entwicklung nicht aufzuhalten sein. Gleichzeitig zwingt sie uns dazu, wieder die alte philosophische Frage nach dem Wesen des Menschen stellen. Nur wer eine Vorstellung vom Wesen des Menschen hat, kann Kriterien angeben, wann Wesensmerkmale verbessert und wann die Gefahr besteht, dass sie zerstört werden. Ein breiter öffentlicher Diskurs darüber wird uns helfen, die genannten Chancen zu nutzen und dabei die Risiken so gering wie möglich zu halten.

Comment to Transhumanism - The Great Danger

by Joey Cochran (USA)

Johannes Grössl has probed many of the vital elements concerning the discussion regarding Transhumanism. He rightly directs us to consider the ethical and political demands that bear down on humanity as a result of Transhumanism's flourishing. He also highlights the competitive impulse which Transhumanism engenders within individuals and nations, and the enlarging inequalities, which will occur, if universal access to human enhancement is not made available. A humanistic and evolutionary worldview imbued with values of freedom and progress would inevitably birth a transhumanistic objective to harness mechanistic and organic means in order to guide human self-improvement. Of any worldview in existence today, Transhumanism is positioned as the best handmaiden to globalization; it also has the power to integrate other philosophical and religious worldviews into its own system, permitting pluralism while achieving worldview dominance. A coherent global worldview consensus could become integrated within this single system that aims to answer some of humanities most troubling problems namely death, famine, plague, and war. The allure of resolving these fundamental human problems through technological and biological means, thus makes Transhumanism an appealing worldview to both promote and fund. Its continuity with enlightened rationalism and romanticism, while also having a "newness" free of baggage, the kind of baggage that the Crusades gives to Christianity, curries even more favor towards this worldview. It is apparent why so many see such potential within this worldview system.

At the same time, this worldview's values impinge upon and conflict with a Christian worldview. Transhumanism will force Christians to revisit fundamental doctrines of the Christian Faith. Granted that the aims of Transhu-

manism become achievable—enhancements that extend life, vastly improve intellect, and check the passions, so one's will conforms to a moral norm set by society, will affect what we interpret Scripture says about the end of all things, heaven, hell and what we interpret Scripture says about what it means to be human. For instance, if life is extended indefinitely, what then is the significance of heaven or hell? If death has been circumvented, what then is the purpose of Christ's death on the cross and the doctrine of atonement? Furthermore, over the longue durée of incremental human enhancements, philosophers will have to eventually ask: Are we still human? And at what point have we become Posthuman? You see, Transhumanism is not just writing a narrative of enhancing humanity; it might just be writing the narrative of humanity's extinction. Transhumanism's offer of intellectual, performative, and emotional enhancements poses a need to address what then becomes of the Creator/creature distinction? Perhaps most poignantly, the doctrine of theosis what God is by nature, man becomes by grace has to be reexamined in light of the achievements of Transhumanism, if realized.

Dr. Grössl rightly asserts that public policy has a difficult time keeping up with technological advances. Theologians and churchmen, known for their reflective posture, indeed, should participate in the shaping of policy and reflect on the



ethical dilemmas incurred by this worldview, modeling a pattern of caution in appropriating Transhumanist values. It is crucial that Christian theologians and churchmen take Transhumanism and its aims seriously, recognizing how its philosophy and values permeate global culture and shape everyday life already. Globally, humanity views technology in generally positive terms. Technology promises efficiency and productivity. It enhances convenience and enables mass consumption for many. Since Transhumanism harnesses technology as a key component, all of the positive public image of technology becomes imported into Transhumanism's public image. Thus, it is not hard to see Transhumanism as desirable. But Transhumanism is not simply a worldview of incredible potential. It is a worldview that is loaded with much risk of the global catastrophic sort.

I am grateful that there appears to be a strong contingent of Transhumanist adherents and those from other worldviews, such as the Christian worldview, who are taking the potential and the risk of this worldview seriously, are engaging in a global conversation of how to negotiate a future that will invite humans to express sorts of morphological freedom and augmentation, in order to navigate an increasingly complex reality, one in which not just the Creator/creation/creature distinction is increasingly blurred, but a blur of the material/immortal reality will exist, as alternate realities like virtual and digital realities become integrated within material reality and become not just a common but a normative mode of existence.

References

- Bostrom, N. & Cirkovic, M. eds. (2008): Global Catastrophic Risk. Oxford University Press.
- Bostrom, N. & Savulescu, J. eds. (2009): Human Enhancement. Oxford University Press.
- Burdett, M. (2015): Eschatology and the Technological Future. Routledge.
- More, M. & Vita-More, N. eds. (2013): The Transhumanist Reader. Wiley-Blackwell.
- Schnieder, S. ed. (2016): Science Fiction and Philosophy: From Time Travel to Superintelligence, second edition. Wiley-Blackwell.
- Thweatt-Bates, J. (2012): Cyborg Selves: A Theological Anthropology of the Posthuman. Ashgate.
- Waters, B. (2006): From Human to Posthuman: Christian Theology and Technology in a Postmodern World. Ashgate.



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Epigenetics – environmental influences control the activity of our genes

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Epigenetik - Umwelteinflüsse steuern die Aktivität unserer Gene

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Under epigenetics one understands the process of gene regulation (which gene is transcribed and how intensively), which was largely overlooked by research until the beginning of this century, although it is of fundamental importance for human life.

The term “epi” (Greek: “above”) makes it clear that no changes of any kind happen to DNA (the construction plan for human life, consisting of 3.3 trillion characters, contained in every cell and controlling all life processes) due to epigenetic processes; instead, switches arranged “above” the construction plan determine how strong the activity of the relevant gene is.

The insights of epigenetics cast a completely new light above all on the predisposition/environment controversy. As far as we know at the moment, it is mainly the life circumstances (quality of relationship, traumas, stress, sleep, nutrition, chemicals, medicines, exercise) and one's own thoughts (Proverbs 4, 23) that determine which gene is switched on or off. This means that it is no longer possible to make a sharp distinction between genetic and environmental influences,

Unter Epigenetik versteht man den Prozess der Genregulation (welche Gene wie intensiv abgelesen werden), der bis zum Beginn dieses Jahrtausends von der Forschung weitestgehend übersehen wurde, obwohl er von grundlegender Bedeutung für menschliches Leben ist. Die Bezeichnung „Epi“ (griechisch: „über“) macht deutlich, dass durch epigenetische Prozesse keinerlei Änderung an der DNA (dem 3,3 Billionen Buchstaben umfassenden in jeder Zelle enthaltenen alle Lebensprozesse steuernden Bauplan menschlichen Lebens) vorgenommen wird, sondern dass durch „über“ den Bauplan angelegte Schalter verändert wird, wie stark das zugehörige Gen aktiv ist.

Die Erkenntnisse der Epigenetik werfen vor allem auf die Anlage-Umwelt-Kontroverse ein völlig neues Licht. Nach aktuellem Kenntnisstand sind vor allem die Lebensumstände (Beziehungsqualität, Traumata, Stress, Schlaf, Ernährung, Chemikalien, Medikamente, Bewegung) und die eigenen Gedanken (Sprüche 4,23) ausschlaggebend dafür welche Gene ein- und ausgeschaltet werden. Hierdurch wird

since a great variety of environmental influences control the activity of genes directly.

A further paradigm change is represented by the insight that gene switchings acquired by parents are passed on to the third and fourth generations. This is also shown in the study by Heijmans et al. (2008) on the descendants of children who suffered extreme undernourishment in the womb during the “hunger winter” of 1944-45 in the Netherlands. Because of the lack of calories available to them for physical growth, during pregnancy they were given epigenetically “reduced construction plans” for their physical and mental constitution (smaller bodies, lower energy consumption, weaker immune system, greater probability of mental illness). All these problems can be observed, in reduced intensity, in the children of these children as well. Meanwhile, many animal experiments have succeeded in proving that epigenetic gene switchings in parents due to trauma, stress, nutrition and toxins are passed on, in mitigated form, as far as at least the third generation of children.

In what follows, some of the factors effective in epigenetics and their consequences are described more accurately.

Stress

Stress was originally a helpful reaction to an acute threat in which all bodily processes not essential for life are “shutdown” epigenetically within seconds (growth, digestive, immune system, learning ability, reproduction). Instead – in order to raise the chances of survival – all bodily activities are programmed for flight or combat readiness, which heart/circulation activities and perception are boosted, with additional energy activated for muscles.

In a living environment with hostile animals or humans, this was a necessary survival process, and once the stress situation was past the emergency stress system was deactivated again within a few minutes.

Increasing pressure to perform and the associated omnipresent stress are leading to a sharp increase in problems due to chronic stress, such as back pain/tension, burnout, depression, diabetes (type 2), raised blood pressure, stomach

deutlich, dass eine klare Trennung zwischen Geneinfluss und Umwelteinfluss nicht mehr vorgenommen werden kann, da verschiedenste Umwelteinflüsse direkt die Aktivität von Genen steuern.

Einen weiteren Paradigmenwechsel stellt zudem die Erkenntnis dar, dass im Laufe des Lebens erworbene Genumschaltungen der Eltern bis in die 3. und 4. Generation weitervererbt werden. Dies zeigt auch die Untersuchung von Heijmans et al. (2008) an den Nachkommen von Kindern, die während des „Hungerwinters“ 1944-45 in der Niederlande im Mutterleib unter extremem Nahrungsmangel litten. Aufgrund des Mangels an zum Körpераufbau zur Verfügung stehenden Kalorien wurde bei diesen Kindern während der Schwangerschaft epigenetisch „reduzierte Baupläne“ für ihre physische und psychische Konstitution aktiviert (kleinerer Körperbau, niedrigerer Energieverbrauch, schwächeres Immunsystem, höhere Wahrscheinlichkeit für psychische Krankheiten). All diese Probleme sind in abgeschwächter Intensität auch bei den Kindern dieser Kinder zu beobachten.

Inzwischen konnte in vielen Tierexperimenten belegt werden, dass durch Traumata, Stress Ernährung und Giftstoffe hervorgerufene epigenetische Genschaltveränderungen der Eltern in abgeschwächter Form mindestens bis in die dritte Kindergeneration weitervererbt werden.

Im Folgenden werden einige dieser epigenetisch wirksamen Faktoren und ihre Folgen genauer beschrieben.

Stress

Stress ist ursprünglich eine hilfreiche Reaktion auf eine akute Bedrohung in der alle nicht lebensnotwendigen Körperprozesse innerhalb von Sekunden epigenetisch „heruntergefahren“ werden (Wachstum, Verdauung, Immunsystem, Lernfähigkeit, Fortpflanzung). Stattdessen werden - um die Überlebenschancen zu erhöhen - alle Körperaktivitäten auf Flucht- oder Kampfbereitschaft programmiert indem die Herz-Kreislaufaktivitäten und die Wahrnehmung gesteigert werden und zusätzliche Energie für Muskeln aktiviert wird.



ulcers, infections, cancer, impotence, and attention and learning problems, for which reason, according to the WHO, stress represents the greatest challenge of the 21st century (Ruess & Mai 2007).

This is true not only of adults, but in increasing measure of children and adolescents as well, as is shown in a study by the DAK (2017) of 7000 school pupils aged between 10 and 17, which showed that 55% of them had headaches at least once a month, and 51% have stomach pains, which are likewise typical symptoms of stress.

There is a good reason why God exhorts man to rest on the seventh day. In particular, "having" to be online permanently, in order not to miss anything, leads to high stress levels, a lack of calmness and relaxation, and, in the course of time, to increased physical and mental problems.

Relationships and thoughts

In Colossians 3,21, "Fathers, do not embitter your children, or they will become discouraged!", Paul makes it clear how important it is not to discourage people. How grave the consequences of discouragement can be is shown in a study by Dar-Nimrod & Heine (2006) in which female students first of all completed a test in German and then one in mathematics. In the German test, one group of students read and worked on a text which maintained that boys were better in maths than girls because their genes gave them a better predisposition for mathematics. Another group read a text in which it was claimed that, genetically, there was no difference between women and men in their mathematical gifts. After this apparent "German test", whose only purpose was to activate different confidences in one's own ability, all groups went through the same mathematics test. The female students who had worked on the text with the "poorer genes" achieved six points in the maths test, whereas those who had tackled the text saying there was no difference between men and women achieved 15 points.

In Proverbs 4, 23, too, "Above all, guard your thoughts, for they decide over your life", the

In einer Lebensumwelt mit feindlichen Tieren oder Menschen war dies ein überlebensnotwendiger Prozess und nach Beendigung der Stresssituation wurde innerhalb weniger Minuten das Notfall-Stresssystem wieder deaktiviert. Der zunehmende Leistungsdruck und damit verbundene allgegenwärtige Stress führt zu einem starken Anstieg der durch chronischen Stress hervorgerufenen Probleme wie: Rückenschmerzen/Verspannungen, Burn-out, Depressionen, Diabetes (Typ2), erhöhter Blutdruck, Magengeschwüre, Infektionen, Krebs, Impotenz, Aufmerksamkeits- und Lernprobleme weshalb laut WHO Stress die größte Herausforderung des 21. Jahrhunderts darstellt (Ruess & Mai 2007).

Dies betrifft nicht nur Erwachsene sondern in zunehmendem Maß auch Kinder und Jugendliche, was eine Untersuchung der DAK (2017) an 7000 Schülern im Alter von 10 bis 17 Jahren zeigt, die ergab dass 55% von ihnen mindestens einmal im Monat Kopfschmerzen und 51% Bauchschmerzen haben, welches zwei typische Stresssymptome sind.

Es hat einen guten Grund, dass Gott die Menschen dazu anhält, am siebten Tag zu ruhen. Insbesondere das permanent online sein „müssen“ um nichts zu verpassen, führt zu hohen Stresspegeln, einem Mangel an Ruhe und Entspannung und im Laufe der Zeit zu vermehrten körperlichen und psychischen Problemen.

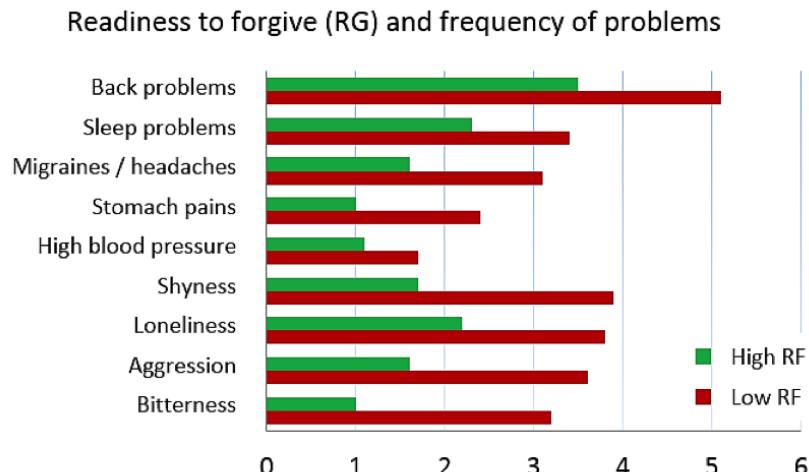
Beziehungen und Gedanken

In Kolosser 3,21: „Ihr Väter, reizt eure Kinder nicht, damit sie nicht mutlos werden!“ macht Paulus deutlich, wie wichtig es ist Menschen nicht zu entmutigen. Welche gravierende Folgen Entmutigung haben kann zeigt eine Studie von Dar-Nimrod & Heine (2006) in der Studentinnen zuerst einen Deutsch- und dann einen Mathestest absolvierten. In dem Deutschttest las und bearbeitete ein Teil der Studentinnen einen Text in dem behauptet wurde, dass Jungen in Mathe besser sind als Mädchen, weil ihre Gene ihnen für Mathematik bessere Voraussetzungen geben (=Gentext). Ein anderer Teil las einen Text in dem behauptet wurde, dass es genetisch keine Begabungsunterschiede zwischen Frauen

Bible shows clearly the power that thoughts have to change our lives. This is underlined by a study on the placebo effect by Benedetti et al. (2003) in which the patients received Diazepam (anxiety-reducing), either injected by a doctor or via an attached catheter; in the latter case, patients did not know when it was administered. Only under the condition that “doctor injects the medication” did the anxiety measured according to STAI (State-Trait Anxiety Inventory) fall by 20%; when the Diazepam was administered “without a relationship” via the catheter, it had no anxiety-reducing effect.

In the Bible, the topic of relationships and attitudes to one's neighbour play a central role. In the Lord's Prayer and in a series of other Bible passages, the Bible exhorts us to forgive others so that... (Hebr. 12,15) “no bitter route grows up to cause trouble and create discord”, or in Ephesians 4,26+27: “In your anger, do not sin: do not let the sun go down while you are still angry, and do not give the devil a foothold”.

In a questionnaire study by Geislinger & Schlagmüller (2016) with 623 test persons, we surveyed the readiness to forgive/practice of forgiveness (RF) among the respondents and related this to the frequency of physical and mental problems they reported. In the diagram below, it is obvious how severely lack of readiness to forgive affects the frequency of physical and mental problems.



und Männer in Mathematik gäbe. Nach diesem „angeblichen Deutschtest“, der einzig den Zweck hatte, unterschiedliches Vertrauen in die eigene Fähigkeit zu aktivieren, wurde bei allen Gruppen der gleiche Mathematiktest durchgeführt. Die Studentinnen, die den Text mit den „schlechteren Genen“ bearbeitet hatten, erreichten im Mathematiktest 6 Punkte während die Studentinnen, die den Text bearbeitet hatten, dass kein Unterschied zwischen Männern und Frauen besteht, 15 Punkte erreichten.

Auch in Sprüche 4, 23: „Achte auf deine Gedanken, denn sie entscheiden über dein Leben“ macht die Bibel deutlich, welche Macht Gedanken haben, unser Leben zu verändern. Dies verdeutlicht eine Studie zum Placeboeffekt von Benedetti et al. (2003) bei der Patienten Diazepam (angstlösend) entweder vom Arzt gespritzt bekamen oder es über einen angeschlossenen Katheder verabreicht wurde und die Patienten nicht wussten, wann es verabreicht wird. Nur in der Bedingung „Arzt spritzt Medikament“ sinkt die mit dem STAI (State-Trait-Anst-Inventar) gemessene Angst um 20%, wenn das Diazepam „beziehungslos“ über den Katheder verabreicht wird, hat es keine angstlösende Wirkung.

In der Bibel spielt das Thema Beziehungen und Umgang mit den Nächsten eine zentrale Rolle. Im Vaterunser und in einer Reihe weiterer Bibelstellen ermahnt uns die Bibel Andern zu vergeben damit... (Hebr. 12,15) nicht etwa eine bittere Wurzel aufwachse und Unfrieden anrichte, oder in Epheser 4,26+27: Zürnt ihr, so sündigt nicht; lasst die Sonne nicht über eurem Zorn untergehen und gebt nicht Raum dem Teufel.

In einer Fragebogenstudie von Geislinger & Schlagmüller (2016) mit 623 Versuchspersonen haben wir die Vergebungsbereitschaft/praxis (VGB) der Umfrageteilnehmer erfasst und in Bezug zu der von ihnen berichteten körperlichen und psychischen Problemhäufigkeit gesetzt. In untenstehendem Diagramm ist ersichtlich wie gravierend sich mangelnde Vergebungsbereitschaft auf die körperliche und psychische Problemhäufigkeit auswirkt.

Humans differ from other mammals above all in the fact that they require many years of protection and care from adults before they can live independently. In contrast to other mammals, however, humans are much more adaptable to changing living conditions. They can survive in very hot regions in Africa (Dallol, Ethiopia, average temperature: 34.4 °C) as well as in Verkhoyansk (Siberia, average temperature: -15.7 °C). This is due, on the one hand, to the ability of human beings to create suitable framework conditions by the use of technology (buildings, clothing, ...), but also to the fact that the human genome contains a very large number of "alternative construction plans" and that "construction plans" epigenetically adapted to the circumstances can be brought into play.

In Matthew 18, 5-10, Jesus shows clearly how important our behaviour towards children is. Investigations of "Adverse Childhood Experiences" (ACE) underline the importance of childhood for the rest of one's life.

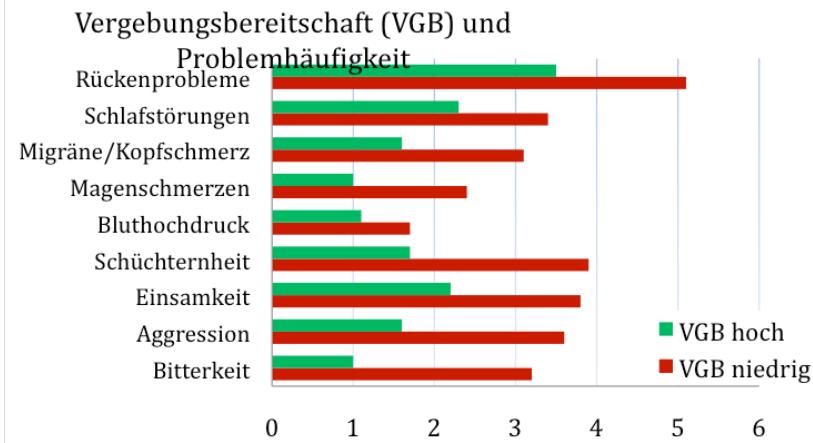
Felitti et al. (1998) asked 9500 adults which traumas they experienced in childhood. Among the most frequently experienced traumas were:

- physical abuse 28%
- addictive substance misuse by parents 27%
- separation of the parents 23%
- sexual abuse 21%

Comparison with the 36% of the adults who had experienced no traumas in childhood with the 13% who had experienced at least 4 traumas showed extreme differences between the two groups:

- average life expectancy 19 years shorter with at least 4 traumas
- the occurrence of a depressive phase lasting at least 2 weeks (14% vs. 51%)
- being raped as an adult (5% vs. 32%)
- consuming illegal drugs (7% vs. 28%)
- suicide attempt (2% vs. 18%)

A study by the research group led by Isabelle Mansuy (Gapp et al. 2016) succeeded in showing that the transgenerational hereditary effect of traumas in mice can be almost entirely cancelled by a stress-free and stimulating environment.



Menschen unterscheiden sich von anderen Säugetieren vor allem dadurch, dass sie viele Jahre Schutz und Fürsorge von Erwachsenen brauchen, bis sie selbstständig leben können. Im Gegensatz zu anderen Säugetieren sind Menschen jedoch viel anpassungsfähiger an sich verändernde Lebensbedingungen. Sie können sowohl in sehr heißen Regionen in Afrika (Dallol, Äthiopien Durchschnittstemperatur: 34,4 °C) als auch in Werchojansk (Sibirien, Durchschnittstemperatur: -15,7 °C) überleben. Dies liegt einerseits an der Fähigkeit des Menschen sich durch den Einsatz von Technik geeignete Rahmenbedingungen zu schaffen (Gebäude, Kleider, ...) aber auch daran, dass das menschliche Genom eine sehr große Zahl an „Ersatzbauplänen“ enthält und je nach Lebensbedingung epigenetisch an die Umstände angepasste „Baupläne“ eingeschaltet werden können.

In Matthäus 18, 5-10 macht Jesus deutlich wie wichtig ihm der Umgang mit Kindern ist. Die Untersuchungen zu „Adverse-Childhood-Experiences“ (ACE, erlebte Trauma in der Kindheit) unterstreichen von die Bedeutung die Kindheit für das weitere Leben.

Felitti et al. (1998) befragten 9500 Erwachsene, welche Kindheitstraumen sie erlebt haben. Zu den am häufigsten erlebten Traumen gehörte

- körperliche Misshandlung 28%
- Suchtmittelmissbrauch der Eltern 27%
- Trennung der Eltern 23%
- Sexueller Missbrauch 21%

Ein Vergleich der 36% der Erwachsenen, die in der Kindheit kein Trauma erlebt haben, mit den 13% die mindestens 4 Traumen erlebt haben,

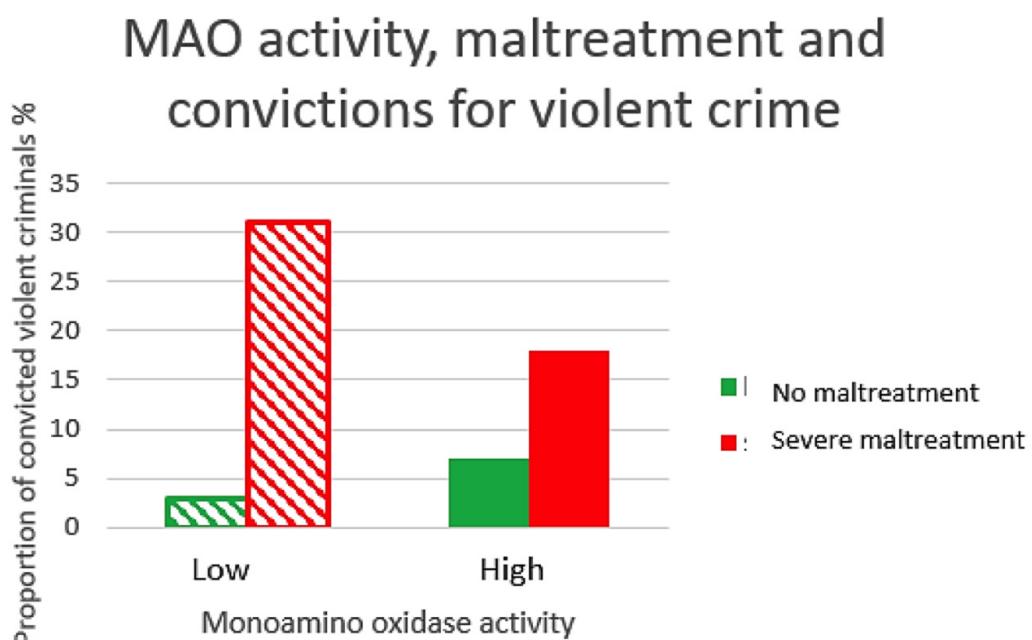
An investigation by Caspi et al. (2002) illuminates the complicated interplay of genetic predisposition and epigenetic influences resulting from maltreatment in early childhood. In this study, two independent variables were measured: monoamino oxidase activity (enzyme which breaks down neurotransmitters and, in the case of too little activity, leads to a prolonged effect of these transmitters such as e.g. aggression) and the occurrence of maltreatment in early childhood. As a dependent variable, the percentage of this group that had been convicted of violent crime was ascertained. From the diagram below, it is clear that, contrary to expectations, a (genetically relatively stable) low level of monoamino oxidase activity and severe maltreatment in early childhood (hatched red bar) leads to a high proportion of convictions for violent crime (31%). The proportion of violent criminals among persons with higher MAO activity (bar on the right), with 18% and 7%, is substantially lower. It is striking, however, that with persons with low MAO activity and no maltreatment, despite the bad genetic MAO initial conditions, the proportion of convicted violent criminals was the lowest of all (3%) and not even half as high as among children without maltreatment and with high MAO activity. This shows clearly that, despite "bad" genetic foundations, a suitable environment enables very positive effects to be achieved epigenetically. In this example, the good environment in early childhood probably had the result that, because of epigenetic switching, neurotransmitters with

ergab gravierende Unterschiede zwischen den beiden Gruppen:

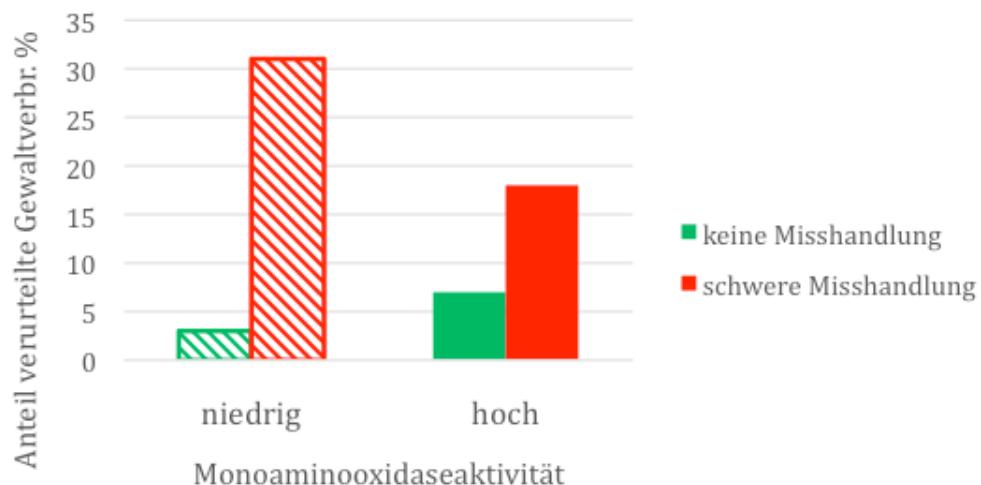
- durchschnittliche Lebenserwartung 19 Jahre geringer bei mindestens 4 Traumen
- Auftreten einer depressiven Phase von mindestens 2 Wochen Dauer (14% vs. 51%)
- als Erwachsene vergewaltigt (5% vs. 32%)
- illegale Drogen genommen (7% vs. 28%)
- Suizidversuch (2% vs. 18%)

Eine Studie der Forschungsgruppe von Isabelle Mansuy (Gapp et al. 2016) konnte zeigen, dass die transgenerationale Vererbungseffekt von Traumen bei Mäusen durch eine stressfreie und anregende Umgebung weitestgehend aufgehoben werden kann.

Eine Untersuchung von Caspi et al. (2002) verdeutlicht das komplizierte Zusammenspiel von genetischen Anlagen und epigenetischen Einflüssen durch frühkindliche Misshandlungen. In dieser Studie wurden als unabhängige Variablen die Monoaminoxidaseaktivität (Enzym, das Neurotransmitter abbaut und bei zu geringer Aktivität zu einer verlängerten Wirkung dieser Transmitter wie z.B. Aggression führt) und das Vorkommen von frühkindlichen Misshandlungen gemessen. Als abhängige Variable wurde der prozentuale Anteil dieser Gruppe, die wegen Gewaltverbrechen verurteilt wurden, erhoben. Aus untenstehendem Diagramm wird ersichtlich, dass erwartungsgemäß eine (genetisch relativ stabile) niedrige Monoaminoxidaseaktivität und schwere Misshandlungen in der frühen Kindheit (schraffierter ro-



MAO-Aktivität, Misshandlungen und Verurteilungen wegen Gewaltverbrechen



frequent positive effects became active. When these effects are then prolonged due to the low MAO activity, this generally has positive effects.

No excessive stress and positive relationships lead, particularly during pregnancy and in early childhood, to numerous epigenetic switchings, which cause, for example, a measurably larger hippocampus (10%) in children and thus improve learning ability (Luby et al. 2012) or promote the establishment of a better stress management system with greater resilience. Epigenetic switching processes during pregnancy affect not only children, but also the mothers, with numerous hormonal changes based on epigenetic processes taking place, as when the bonding hormone "oxytocin" is produced in greater quantities. Recent research even discovered evidence that, in "first-time fathers", the birth led to a permanently lower level of testosterone (Edelstein et al. 2014).

Nutrition and hormonally active chemical substances

Not only relationships and stress are of central importance for epigenetic switchings in pregnancy and childhood, but also the nutrition of the parents before the pregnancy, of the mother during the pregnancy, and of the child after the birth result in a multitude of gene switchings. On the one hand, insufficient nutrition during pregnancy, as already described above (Heijmans et al. (2008), "hunger winter"), leads to

ter Balken) zu einem hohen Anteil an Verurteilungen wegen Gewaltverbrechen (31%) führt. Der Anteil an Gewaltverbrechern bei Personen mit hoher MAO-Aktivität (Balken rechts) liegt mit 18% und 7% deutlich niedriger. Auffällig ist jedoch, dass bei Personen mit niedriger MAO-Aktivität und keinen Misshandlungen trotz der genetischen MAO-Vorbelastung der Anteil an verurteilten Gewaltverbrechern am niedrigsten liegt (3%) und nicht einmal halb so hoch ist wie bei den Kindern ohne Misshandlung und mit hoher MAO-Aktivität. Dies verdeutlicht dass trotz „schlechter“ genetischer Grundlagen durch eine geeignete Umwelt epigenetisch sehr positive Effekte erzielt werden können. In diesem Beispiel führt die gute Umwelt der frühen Kindheit wahrscheinlich dazu, dass aufgrund epigenetischer Umschaltungen häufig positiv wirkende Neurotransmitter aktiv sind. Wenn diese dann aufgrund der niedrigen MAO-Aktivität länger wirken, hat das in der Regel positive Auswirkungen.

Kein zu hoher Stress und positive Beziehungen bewirken vor allem während der Schwangerschaft und in der frühen Kindheit viele epigenetische Umschaltungen, die beispielsweise zu einem messbar größeren Hippocampus (10%) bei den Kindern führen und somit die Lernfähigkeit verbessern (Luby et al. 2012) oder den Aufbau eines besseren Stressverarbeitungssystems mit höherer Resilienz fördern.

Nicht nur bei den Kindern wirken während

many gene switchings. Opulent nutrition intake by parents and grandparents reduces the life expectancy of descendants (Kaati et al. 2002) and increases the incidence of type 2 diabetes (Rogers, 2003). Similarly, a lack of iodine and folic acid during pregnancy leads to a different brain structure which is associated with lower intelligence.

The damaging effects of nicotine, drugs, alcohol and some medicines during pregnancy have been known for a long time now, but their epigenetic mechanisms have only been discovered in the last few years.

In particular, chemical substances with hormonal outworkings, e.g. pesticides such as DDT or Glyphosat, but also frequent administration of antibiotics, change the macrobiotic equilibrium in the intestines and can lead to disproportionate multiplication of bacterial strains whose excretions trigger severe epigenetic switchings in the brain. In this regard, Finegold (2002) was able to show that large quantities of Clostridium bacteria are found in the intestines of children with autism, but are not present in children without autism. These Clostridia produce propionic acid which, when injected into the brains of rats, makes them autistic, due to epigenetic switchings, for around 30 minutes, until the propionic acid is broken down.

Sandler et al. (2000) gave 11 children with high levels of autism and high Clostridia counts in their intestines the emergency antibiotic Vancomycin, which is one of the few medicines that reduce the Clostridia count very significantly while it is being taken. The autism disappeared in 8 of the 11 children during the time in which the Vancomycin was taken.

Bisphenol A (BPA) is likewise a very strongly hormonally active substance (=endocrine disruptor). In an investigation by J. Wolstenholme et al. (2011), so much BPA was administered to mice in their food that their BPA level in their blood was comparable to that of pregnant American women. The descendants of these mice and their children displayed behavioural changes down to the fifth generation in the way they explore their cages and in their interactions with their conspecifics.

Zhuo et al. (2017) administered to male mice, over a period of several months, doses of BPA

der Schwangerschaft epigenetische Schaltprozesse, auch bei den Müttern finden viele auf epigenetischen Prozessen basierende Hormonumstellungen statt, so wird das Bindungshormon „Oxytocin“ vermehrt produziert. Neuere Forschungen fanden sogar Belege dafür, dass bei „erstgebärenden“ Vätern durch die Geburt ihr Testosteronspiegel dauerhaft gesenkt wird (Edelstein et al. 2014).

Ernährung und hormonaktive chemische Substanzen

Nicht nur Beziehungen und Stress sind in Schwangerschaft und Kindheit von zentraler Bedeutung bei epigenetischen Schaltungen, auch die Ernährung der Eltern vor der Schwangerschaft, der Mutter während der Schwangerschaft und des Kindes nach der Geburt bewirken eine Fülle an Genumschaltungen.

Einerseits führt eine Mangelernährung während der Schwangerschaft wie bereits oben beschrieben (Heijmans et al. (2008) „Hungerwinter“) zu vielen Genumschaltungen. Eine üppige Nahrungsaufnahme der Eltern und Großeltern verkürzt die Lebensdauer der Nachkommen (Kaati et al. 2002) und erhöht das Auftreten von Diabetes Typ 2 (Rogers, 2003). Auch ein Mangel an Jod und Folsäure während der Schwangerschaft führt zu einem anderen Gehirnaufbau, der mit niedrigerer Intelligenz einhergeht. Schon lange bekannt sind die schädlichen Wirkungen von Nikotin, Drogen, Alkohol und einigen Medikamenten während der Schwangerschaft, deren epigenetische Wirkmechanismen erst seit wenigen Jahren bekannt sind.

Vor allem chemische Substanzen, die hormonähnlich wirken, z.B. Pflanzenschutzmittel wie DDT oder Glyphosat, aber auch häufige Antibiotikagaben verändern das mikrobiotische Gleichgewicht im Darm und können dazu führen, dass Bakterienstämme sich übermäßig vermehren deren Ausscheidungen gravierende epigentische Umschaltungen im Gehirn bewirken. So konnte Finegold (2002) zeigen, dass im Darm von Kindern mit Autismus große Mengen von Clostridiens Bakterienstämmen vorkommen, die in Kindern ohne Autismus nicht vorhanden sind. Diese Clostridien produzieren Propriionsäure, die, wenn sie Ratten ins Gehirn gespritzt wird, diese innerhalb von Sekunden

considered to be non-critical, and as a result the reproductive capability of the mice was substantially reduced.

Rattan et al. (2017) found evidence that many hormonally active substances, such as bisphenols, heavy metals, phthalates and pesticides significantly changed the fertility and hormonal activity of adult women.

All these investigations show that the effects of the chemical auxiliary agents present everywhere in our surroundings are not always positive, and, despite keeping within the limiting values considered “safe”, on the epigenetic level they cause a multitude of changes in the human body with which future generations will have to battle.

The complex problem of the so-called “endocrine disruptors” is well summarised in the book “Losing Our Minds: How Environmental Pollution Impairs Human Intelligence and Mental Health” by Barbara Demeneix (2014), one of the leading researchers in this field.

Science is still a long way from understanding the complex epigenetic regulation mechanisms, such as those responsible for developing completely different cell types (blood, skin, bones etc.) from the DNA (construction plan information) of a single fertilised cell.

In the foreseeable future, however, we will reach the stage that, with the help of the meanwhile relatively simple-to-use CRISPR-Cas9 procedure, parts of the genome can be cut out and replaced by others. In China, He Jiankui has used this method to change the genes of the fertilised eggs of twins in such a way that they could not be infected by their HIV-positive father (Nature 2018). In the meantime, Chinese researchers (Shi et al. 2019) have implanted human genetic material into human rhesus monkeys, resulting in raised intelligence in the monkeys. On the other hand, a number of the monkeys died, which was most probably due to the fact that the changed construction plan for the brain no longer agreed with the epigenetic regulation mechanisms, which – put simply – regulate the succession of steps in the construction plan and whose way of working we have not yet understood.

In the last 50 years, especially with the use of chemical “aids”, mankind has changed creation

durch epigenetische Umschaltungen für ca. 30 Minuten in Autisten verwandelt bis die Propionsäure abgebaut ist.

Sandler et al. (2000) gaben 11 Kindern mit hochgradigem Autismus und hoher Clostridienzahl im Darm das Notfallantibiotika Vancomycin, das eines der wenigen Medikamente ist, das während seiner Einnahme die Zahl der Clostridien sehr stark reduziert. Daraufhin verschwand bei 8 der 11 Kinder der Autismus während der Zeit in der das Vancomycin eingenommen wurde.

Auch Bisphenol A (BPA) ist eine sehr stark hormonaktive Substanz (=endogener Disruptor). In einer Untersuchung von J. Wolstenholme et al. (2011) verabreichten diese Mäusen mit der Nahrung so viel BPA, dass ihr BPA-Blutspiegel vergleichbar war mit dem von schwangeren Amerikanerinnen. Die Nachkommen dieser Mäuse und ihre Kinder zeigten bis in die fünfte Generation Verhaltensveränderungen bei der Erforschung ihrer Käfige und der Beschäftigung mit ihren Artgenossen.

Zhuo et al. (2017) verabreichten männlichen Mäusen über mehrere Monate hinweg als unkritisch eingestufte Dosen von BPA woraufhin sich die Zeugungsfähigkeit der Mäuse deutlich verringerte

Rattan et al. (2017) fanden Belege dafür, dass viele hormonähnlich wirkende Substanzen wie Bisphenole, Schwermetalle, Phalate und Pesticide die Fruchtbarkeit und die Hormonaktivität von erwachsenen Frauen signifikant verändern. All diese Untersuchungen zeigen, dass die Wirkungen der in unserer Umwelt allgegenwärtigen chemischen Hilfsstoffe nicht nur positiv sind, und trotz des Einhaltens von als „sicher“ geltenden Grenzwerten epigenetisch eine Fülle von Veränderungen im menschlichen Körper bewirken mit der zukünftige Generationen zu kämpfen haben werden.

Sehr gut zusammengefasst ist die Problematik dieser sogenannten „Endogenen Disruptoren“ in dem Buch: „Losing Our Minds: How Environmental Pollution Impairs Human Intelligence and Mental Health“ von Barbara Demeneix (2014), einer in diesem Bereich führenden Forscherinnen.

Die Wissenschaft ist noch weit davon entfernt, die komplexen epigenetischen Regelungsme-

more than in the entire time that human life has existed. Climate change, the negative epigenetic effects of “endocrine disruptors”, or the steep increase in illnesses resulting from stress suggest that here a “Pandora’s box” has been opened; there is reason to fear that the use of CRISPR-Cas9 will lead to even more incalculable long-term effects if man becomes creatively active without being able to foresee the complex consequences of his actions.

References

- Benedetti, F.; Pollo, A.; Lopiano, L.; Lanotte, M.; Vighetti, S. & Rainero, I. (2003). “Conscious Expectation and Unconscious Conditioning in Analgesic, Motor, and Hormonal Placebo/Nocebo Responses”. *Journal of Neuroscience* 15 May 2003, 23 (10) 4315-4323.
- Caspi, A.; McClay, J.; Moffitt, TE.; Mill, J.; Martin, J.; Craig, IW.; Taylor, A. & Poulton, R. (2002). “Role of genotype in the cycle of violence in maltreated children”. *Science*. 2002 Aug 2;297(5582):851-4.
- DAK Präventionsradar (2017) URL: www.dak.de/dak/download/praeventionsradar-1936276.pdf [1.10.2017]
- Dar-Nimrod I & Heine SJ (2006). “Exposure to scientific theories affects women’s math performance”. *Science* 2006; 314: 435.
- Edelstein, R.; Wardecker, B.; Chopik, W.; Moors, A.; Shipman, E. & Lin, N. (2014). “Prenatal hormones in first-time expectant parents: Longitudinal changes and within-couple correlations”. *American Journal of Human Biology*, Volume 27, Issue 3.
- Felitti, VJ.; Anda, RF.; Nordenberg, D.; Williamson, DF.; Spitz, AM.; Edwards, V.; Koss, MP. & Marks, JS. (1998). “Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study”, *American Journal of Preventive Medicine*, 1998 May; 14(4):245-58.
- Finegold, S.; Molitoris, D.; Song, Y.; Liu, C.; Vaisanen, M.; Bolte, E.; McTeague, M.; Sandler, R.; Wexler, H.; Gapp, K.; Bohacek, J.; Grossmann, J.; Brunner, A.; Manuela, F.; Nanni, P. & Mansuy, I. (2016). “Potential of environmental enrichment to prevent transgenerational effects of paternal trauma”. *Neuropsychopharmacology*, 41(11):2749-2758.
- Geislanger, R. & Schlagmüller, M. (2016). “Die Untersuchung der Zusammenhänge zwischen Vergebung und Gesundheit sowie der Bedeutung von Gottesbeziehung und Vergebungserfahrungen für die Vergänglichkeit auf Grundlage des Vergebungsmodells von W. Soldan”. Unpublished bachelor dissertation, ICP-Kitzingen.
- Kaati, G.; Bygren, LO. & Edvinsson, S. (2002) “Cardiovascular and diabetes mortality determined by nutrition during parents’ and grandparents’ slow growth period”. *European Journal of Human Genetics* 10: 682–688.
- Luby, J.; Barch, D.; Belden, A.; Gaffrey, M.; Tillman, R.; Babb, C.; Nishino, T.; Suzuki, H. & Botteron, K. (2012).
- chanismen zu verstehen, die beispielsweise dafür verantwortlich sind, dass sich aus der DNA (Bauplaninformation) einer einzigen befruchteten Zelle völlig unterschiedliche Zelltypen (Blut, Haut, Knochen, u.a.) entwickeln. In absehbarer Zeit wird es jedoch dazu kommen, dass mit Hilfe des inzwischen relativ einfach anwendbaren CRISPR-Cas9 Verfahrens Teile des Genoms herausgeschnitten und durch andere ersetzt werden. In China hat He Jiankui mit dieser Methode die Gene der befruchteten Eizellen von Zwillingen dahingehend verändert, dass sie nicht von ihrem HIV-positiven Vater angesteckt werden können (Nature 2018). Inzwischen haben chinesische Forscher (Shi et al. 2019) Rhesusaffen menschliche Genschnipsel eingepflanzt, die zu einer Erhöhung der Intelligenz der Affen geführt haben. Allerdings starb auch ein Teil der Affen, was mit großer Wahrscheinlichkeit daran liegt, dass der veränderte Gehirnbauplan nicht mehr mit den epigenetischen Regelungsmechanismen übereinstimmt, die - vereinfacht gesagt - die Abfolge der Schritte des Bauplans regeln und von denen man noch nicht herausgefunden hat, wie sie arbeiten.
- Die Menschheit hat in den letzten 50 Jahren vor allem durch den Einsatz von chemischen „Helfern“ die Schöpfung mehr verändert als in der gesamten Zeit seit der es menschliches Leben gibt. Der Klimawandel, die negativen epigenetischen Wirkungen der „endogenen Disruptoren“ oder auch die starke Zunahme von Stressfolgeerkrankungen spricht dafür, dass hier wahrscheinlich eine „Dose der Pandora“ geöffnet wurde, und es ist zu befürchten, dass durch den Einsatz von CRISPR-Cas9 noch unüberschaubarere Langzeitwirkungen entstehen, wenn der Mensch schöpferisch tätig wird, ohne die komplexen Folgen seines Handelns abschätzen zu können.

“Maternal support in early childhood predicts larger hippocampal volumes at school age”. Proceedings of the National Academy of Sciences Feb 2012, 109 (8) 2854-2859.

Marlowe, E.; et al. (2002). “Gastrointestinal Microflora Studies in Late-Onset Autism”. Clinical Infectious Diseases 2002, 35, p6–p16.

Rogers, I. (2003). “The influence of birthweight and intrauterine environment on adiposity and fat distribution in later life”. International Journal of Obesity and Related Metabolic Disorders 27: 755–777.

Ruess A. & Mai J. (2007, 28.März): „Volkskrankheit Stress – und kein Ende“, in: Handelsblatt. URL: www.handelsblatt.com/karriere/nachrichten/volkskrankheit-stress-und-kein-ende/2788788-all.html [26.06.2019]

Comment to “Epigenetics – environmental influences control the activity of our genes”

by Kenneth Logan (USA)

Recent research findings and theoretical determinations about the epigenetic process are suggesting both hope and accountability in how we deal with our behavior and experiences, and the subsequent impact on future generations.

Although our DNA sequence itself does not change through our experiences, the expression of DNA replication is altered through the modified function of the epigenome. Gene expression modification happens through changes in methylation or histone function. Methylation functions like a chemical cap that limits genes from being expressed. Likewise, histone function can be altered. This alteration can cause changes in gene expression by wrapping desirable genes too tightly, which limits gene replication. Alternatively, other undesirable genes can be turned on, due to a loosening of histones.

These recent discoveries are finding hope in the positive impact of life enrichment activities on those affected by trauma and the offspring of those affected by trauma. Actions taken to recover from trauma positively impact a survivor’s biology. We have known this for a long while now. What we did not realize was the impact on the expression of the survivor’s DNA and then the subsequent manifestation of those changes in the survivor’s offspring. Hope for future generations is found in the current generation’s courage to recover from the effects of adverse life events.

We find accountability in the epigenetic research as well. Our behaviors and experiences do not merely affect us alone. It also affects future generations. Our adverse experiences and

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our choices to engage in unhealthy behaviors do not just affect us. They affect our children and grandchildren. From this perspective, we are challenged to make good lifestyle choices. We are accountable to protect future generations through our courage to pursue growth and recovery and to make lifestyle choices that minimize adverse life events. Enriching our lives and changing our behaviors promote both the psychological and genetic healing of the individual in addition to the gene expression in future children.

The research currently focuses on epigenetic influences on health and wellbeing. I sincerely appreciate Schlagmüller’s integration of epigenetic research outcomes with the biblical text. He offers us a biological rationale for the directions provided to us in the holy scriptures. I was reflecting on the verses in Exodus 20:4-6, which talk about iniquities being visited on the

third and fourth generations and God's desire to show grace and a steadfast loving kindness to thousands of generations of those who love Him and keep His commandments. Is this new understanding of epigenetics the biological premise behind this principle? Do we see an epigenetic reality in the stories of sin, weaknesses, and other tendencies handed down to us through previous generations? This made me contemplate the potential genetic influence that shows up in the tendencies we see in Abraham's family, the deception of Jacob, David's many failures, as well as any other examples we see in the life stories in the bible.

I sincerely appreciate Schlagmüller's perspec-

tive on this topic. We are challenged to think more seriously about:

1. the effects of our choices on our biology,
2. the potential impact of our traumas and poor life choices on the wellbeing of future generations,
3. to expand our thinking beyond a simplistic nature versus nurture debate,
4. the importance of the biblical narrative to engage in spiritual activities (forgiveness, reconciliation, confession, etc.)
5. the importance to encourage ourselves and others not merely to survive adverse life events, but to heal and recover fully from them, and
6. to see a recovery process as a biblical prescription that we are encouraged and held accountable to engage in for our sake and our children and grandchildren's sake.

William L. Hathaway (USA)

The Imago Dei & Embodied Cognition

Theological anthropology is a central issue for a robust integration project in the psychology and theology. What are the implications of humans being made in the image and likeness of God for Christian psychology? This is an issue that engages perennial theological debates about the imago Dei such as the ontic-axiological pre-conditions for human dignity, the mind-body problem, the nature of the soul, explaining consciousness, personal identity, or even eschatological concerns. Three major approaches to the imago Dei theology are examined: substantive-structural, functional, and relational. Some additional strategies are also considered such as eclectic combinations of the three major approaches or teleological models that see the imago Dei as connected with the broader canonical treatment of the Imago including Christological themes. Problems with each of these approaches persist. The paper concludes by exploring how the developing area of embodied cognition, particularly in the areas of perception psychology, consciousness studies, and psychological linguistics might point towards a synthesis of productive insights and suggest a path forward for integrative approaches on the imago Dei.

The Imago Dei and Embodied Cognition

Christians behavioral scientists engaged in the project of integrating faith and learning find a point of connection with a relevant endeavor from theological anthropology. Cortez (2010) defines theological anthropology as "...that area of Christian reflection that seeks to understand the mystery of humanity by reflecting theologically and, thus, Christologically-on the human person in constant and critical dialogue with the other anthropological disciplines" (n.p.). A central issue in theological anthropology concerns what is meant by the Biblical concept of the image of God. This notion, frequently referred to by its Latin phrasing as the imago Dei,

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has been a subject of Christian theological speculation since the patristic period (Berkouwer, 1962, Erickson, 2013, McGrath, 2017). In this paper, the major theological views of the imago Dei will be examined in light of interdisciplinary work in the behavioral sciences on embodied and enacted cognition and the philosophy of mind.

The imago Dei can be approached theologically at different levels. It presents an exegetical challenge that concerns Biblical theology (Berkouwer, 1962, Briggs, 2010, Crouch, 2010, Krause, 2005, Miller, 1972). But also, it has been a project for other areas ranging from pastoral psychology to systematic theology (Dayringer, 2012, Driver, 2013, Erickson, 2013, MacDonald, 2008, Peterson, 2016). A cardinal passage for the imago Dei is Genesis 1:27-27:

26 Then God said, "Let Us make man in Our image, according to Our likeness; and let them rule over the fish of the sea and over the birds of the [a]sky and over the cattle and over all the earth, and over every creeping thing that creeps on the earth." 27 God created man in His own image, in the image of God He created him; male and female He created them.- NASB.

Contemporary Biblical theologians have typically claimed that while the phrase "image of God" is found in this passage, what the image actually denotes is not to be found there (Briggs, 2010, Cortez, 2010). Despite its influential im-

pact on Christian theology and perhaps even human culture through a precipitating role it served in the growth of the human rights tradition, social justice movements and philanthropic service, there is theological controversy about what is meant by the phrase (Kilner, 2015, Pryor, 2011). Crouch notes “the text’s suggestion of a close connection between human beings and the divine has inspired more exegesis than perhaps any other single passage in the Hebrew Bible” (p. 2).

The key words that are used in Genesis 1:26 to convey humanity’s relation to the divine is that man (Hebrew: adam-אָדָם / Greek: ἄνθρωπος-anthropos) is made in the image (Hebrew: tselem-צֶלֶם / Greek: εἰκόνα- eikón) and likeness (Hebrew: d’muth-דְּמֻתָּה / Greek: ὁμοίωσις- homoiōsis) of God. Bray (1991) notes that “The semantic range of the main terms.... is now broadly agreed. The former refers primarily to a concrete image, a definite shape; the latter is more abstract—a resemblance, or a likeness” (p. 197). Yet even with the literal denotation of tselem referring to a carved out physical shape or form, the weight of scholarship and tradition understands this term in a metaphorical sense. Jewish interpretation often denied any anthropomorphic understanding of the image that would identify humanity with the divine (McGrath, 2017). Early Christian understandings frequently saw the image of God in terms of some shared or analogous characteristic between humanity and God (Cortez, 2010). Attempts to grapple with the precise meaning of the Hebrew ascription of the “image” and “likeness” of God to humanity continues. For instance, Crouch (2011) has recently argued that the phrasing is meant to convey a parentage analogy: God is the “parent” of humanity metaphorically just as Adam is the parent of Seth. He provides various support for this assertion including citing the statement in Genesis 5:3 that Seth was in the image and likeness of Adam and pointing out the presence of God as parent motif throughout the Bible.

Early Patristic writers, such as Tertullian or Origen, often made much of the two different words in Genesis 1:26 translated as “image” and “likeness” in English: A common type of theological distinction in ancient and medieval Chri-

stian thought was that humans retain the image of God (tselem) after sin entered the world but not the likeness of God (demuth) (McGrath, 2017). Some ancient and medieval writers saw the restoration of the likeness of God in humanity as the end or telos of the redemptive work of Christ.

The imago Dei resurfaces as an explicit notion in a number of Biblical passages. The prohibition against murder in Genesis 9:6 is explained because humans are made in the image of God. James 3:9 forbid cursing others because they are made in the “likeness of God”. The redemption story involves humanity being made into the “image of the son” and humans must put on the new self to represent the image of God as Jesus does (Erikson, 2013). Blomberg (2016) reviews the New Testament usage of the Greek words for image (eikon) and likeness of God (homoioma). He notes a particularly close connection in Paul’s view of believers reflecting the glory of God through moral righteousness and being conformed to the image of God., Kilner (2015) comments that Paul’s message in Colossians (Col 1:15, 3:10) and 2 Corinthians (2 Cor 3:18, 4:4) “...consistently distinguish between Christ, who is God’s image, and people who need transformative growth according to the standard of the image....people are not God’s image now in the way that Christ is; however, they are intimately connected with God because God’s image is the very blueprint for humanity” (p. 91-92).

Before discussing the three main types of imago Dei theologies before let us first note areas of broad agreement in Christian thought about it. Cortez (2010) notes a number of areas of “general consensus”: imaging God has to do with “reflecting God in creation”, all persons do this in some way, scholars now widely think “image” and “likeness” in Genesis 1 are synonymous, sin has impacted the image in some way, the image in the New Testament is Christological with Jesus being its perfect exemplar, and the image of God is teleological, not static.

Theologies of the Imago Dei

Table 1 presents the three major families of views about the imago Dei. Some key lines of support and criticism are also presented. We will now briefly summarize each of these views



Theologies of the Imago Dei

Table 1 presents the three major families of views about the imago Dei. Some key lines of support and criticism are also presented. We will now briefly summarize each of these views and their current status.

Substantive/Structural. The dominant Christian theological tradition until recently has been the substantive or structural view. This view holds that the imago Dei is a quality or compacity of humans that reflects a quality or capacity of God such as possession of a soul, consciousness, reason, or volition/agency (Blomberg, 2016, Erikson, 2013, McGrath, 2017). The term “substance” is used in this context to refer to some constitutional similarity between humans and God, although orthodox proponents are quick to deny any physical similarity. Boyd and Eddy (2002) articulate a common form of this view: “the imago Dei means that in all of God’s creation, humans have a soul. The imago Dei is not something we do; it is something we are. It is our essence” (p. 76).

This view is also known as the structural view since an alternative way of describing it is that humans are structured with characteristics that represent analogous characteristics of God. The capacity to reason was a frequent contender for such a mirroring capacity. Augustine sees an analogy in a proposed tripartite structure of the human rational faculties (memory, intellect, volition) and the Trinity (Augustine, 2002, Drever, 2013, McGrath, 2016). Aquinas would similarly emphasize rationality (Aquinas, 2010, Dorman, 2001).

A number of lines of support have been advanced in favor of the substantive or structural view. It is the clearly dominant Christian interpretation of the imago Dei in Christian tradition until recent centuries (Berkouwer, 1962, Erickson, 2013, McGrath, 2017). Substantive views often assert that the divine reflection present from a possession of a soul provides a robust basis for human equality and worth regardless of one’s station, abilities, race, gender or other differences (Boyd & Eddy, 2002; Dorman, 2001). Is there difference between creatures that God has structured to distinctively possess His image

bearing structure that can be known by humans? Substantivists have frequently proposed some characteristic, or group of Godward characteristics, as constituting the substance of the divine image. They have often identified faculties, such as reason, they assert are present in humans but not in non-human animals. Some have claimed their understanding of the unique aspect of the image in humans is evident in Scripture. Others substantivists do not presume the relevant faculties are denoted in Scripture but have proposed characteristics that they believe can be synthesized with Biblical teaching without conflict.

Despite the longstanding acceptance of the substantive-structural view, it has fallen out of favor in contemporary theology. It is perhaps not surprising in an era after Darwin that worldviews which espouse a radical discontinuity between humanity and the animal kingdom would become challenged. Yet not everyone has ceded the territory. For instance, Moreland (2009) defends a non-reductive, dualistic view of consciousness as marking a “recalcitrant imago Dei” that cannot be eliminated by contemporary reductionist efforts.

Yet there are other considerations that have eroded support for the traditional view. While the demonstration of distinctive human capacities that seem analogous to attributes of God provide an intuitive reason to identify such capacities with the imago Dei, such post hoc observations do not demonstrate by themselves that this is what the Bible means by terms conveying the imago Dei in their original context. Critics of the substantive view have noted that the text does not tell us what precisely makes up the image or likeness of God that humanity reflects (Cortex, 2010). MacDonald (2008) comments “.... there is widespread agreement that the traditional understanding of the imago as an intellectual, spiritual or moral faculty has to be abandoned and that its significance must be established on exegetical grounds rather than as an *a posteriori* comparison with the animal kingdom” (p. 304).

As we noted, the most common capacity advanced as a constituent for the divine image has been the human rational faculties. A number of scholars over the last century have alleged this

is an emphasis that represents an eisegetical reading of Greek worldviews back into the Hebrew text. It is a cultural imposition of something alien onto the text (Blomberg, 2016, Boyd & Eddy, 2002, Cortez, 2010). Thus, despite the weight of tradition, the substantive-structural view is seen as having questionable Biblical warrant in several contemporary theological contexts. For instance, Barth (1958) influentially rejected the substantive-structural views as reading into the text convenient anthropologies available to the reader (Crouch, 2011).

Although sharing the *imago Dei* could be a great equalizer for human dignity, substantive-structural views which emphasize capacities like reason as the *imago Dei* risk doing the opposite. Humans vary enormously in rational capacity with some so severely deficient relative to the norm that some animals have demonstrated higher levels of communicative abilities. If the *imago Dei* is the basis for human worth and dignity but humans vary significantly in the extent to which they possess the quality which constitutes it, would that not make those with such relative deficits lesser inferior exemplars of the divine image? Kilner (2015) reviews the remarkable positive contributions of the belief that humans are made in the *imago Dei* to human history but also a long and tragic history in which some understandings of the doctrine function destructively. He concludes: "...if being in God's image is indeed rooted in current human attributes—or in anything that can vary among people because it is changeable due to sin-history teaches an important lesson. The idea that humanity is created in God's image will not just be a source of great liberation, it will continue to invite terrible devastation" (p. 37).

Functional. Another view favored by many contemporary Old Testament scholars holds that *imago Dei* is a function of humans that reflects a function of God such as having dominion over creation. This view notes the ancient Near Eastern practice of rulers establishing a representation of themselves that stood as their image. To honor or dishonor the image was respectively to honor or dishonor the ruler (Brueggemann, 1982). This practice can be seen in

Nebuchadnezzar's placing of a gold statue (*tselem*) in Babylon that was treated as if it were the king. Thus, recall that Daniel's three compatriots would have died in the furnace for refusing to bow before the statue had it not been for God's miraculous deliverance (Dan 3:1-7). Humans made in the image of God are created with a dominion mandate to "rule over" creation (Genesis 1:26ff). The rule of humanity over creation is reflected in other passages tied to our position in creation as well (Psalm 8). This charge to rule over creation is a commission to superintend for God as later Hebrew kings were to rule their people as a charge from God (Erickson, 2013). The notion that humanity is the image of God as an earthly representation of His royal authority has been described as "consensus" in Biblical interpretation since the 1970's (Lints, 2015).

Despite the current popularity of this view among exegetes it is not without dissenters. A number of commentators have pointed out that there is little support in tradition for the functional view (Kilner, 2015). While functionalist advocates support their view mostly on exegetical grounds tied to particular Old Testament texts and criticize the alternative views for anachronistically imposing alien understandings onto the horizon of the authors of those texts, similar erroneous interpretative indictments have also been laid at the door of the functionalists. Some have claimed that because Genesis 1 has humanity made in the image of God prior to dominion charge rulership cannot be what constitutes the image (Kilner, 2015). Cortez (2010) also sees the refusal to consider the canonical development of the notion of the *imago Dei* as a truncated way to understand the full Biblical teaching about the concept. This later criticism reflects divergence over proper hermeneutical methods and thus will carry force only if one shares a hermeneutic that views the whole of Scripture as relevant for the interpretation of any part of it (Osborne, 2007).

Relational. The relational view holds that the *imago Dei* consists of the relationality present in humanity reflecting the inherent relationality of the Trinitarian God. Such a view is convergent with social views of the Trinity advanced

by Moltmann (1993/1981) and others. While it is recent view, it has some precedent in ancient Christian commentators who saw in the plural/singular self-description of God as creator in Genesis 1 possibly prefiguring of the Trinity (Cortez, 2010). There is an interesting Hebrew linguistic pattern in Genesis 1 that some view as bearing on the relationality of the imago Dei. Kilner (2015) observes

Genesis 1:26 introduces the creation of humanity using a singular noun, adam, to which verse 27 refers by using both a singular and a plural pronoun. In other words, there is a tension between the singularity and plurality of humankind.... the Hebrew text indicates that in some sense it is the single entity, humanity as a whole, that is associated with God's image.... Genesis 1:27 does indeed associate "humankind"/adam with a plural pronoun as well as a singular noun. The author here suggests that the male and female components of the whole (plural)- not just the whole itself represented by Adam (singular)- are directly involved with the image-of-God designation. (p. 86).

While admitting that Biblical scholars prefer the functional view, MacDonald (2008) notes that many systematic theologians prefer the relational because of its relevance to other theological concerns or its fit with the canonical narrative. Critics of the relational view point to its relative novelty. It also requires, perhaps anachronistically, that one assume a proto-Trinitarian understanding of God by the Genesis writer (Barr, 1968, Cortez, 2010).

Other Views. While the three categories of views discussed above represent the predominant positions in Christian attempts to understand the imago Dei, efforts at finding an alternative have been increasing in recent years. Some positions that adopt a teleological view that de-emphasize the image of God as something that can be equated with current attributes humans possess. Rather is to be found in those who will exhibit the image of Christ in the future (Kilner, 2015, Peterson, 2016).

Kilner (2015) rejects all three of the primary views of the imago Dei in favor of what McKirkland (2015) calls a "non-attributional view". He states that "actual likeness to God is not what

being created in God's image involves. Creation in God's image is God's expressed intention that people evidence the special connection they have with God through a meaningful reflection of God" (p. 79). "Being in the image of God...", he further explains, "...is about a destiny in which God intends that humanity will manifest attributes resembling God's, in appropriate measure, to God's glory" (p. 281).

Similarly, Peterson (2016) found all the three influential views deficient as solitary definitions. He offers a "canonical re-reading" of the imago Dei as "identity" (p. 53). He considers various uses of the term identity in the social sciences and focuses on identity as something fixed and unchanging. He asserts that the "...image of God is human identity and this identity is given by God to all humanity..." (p57). Just as the identity of the Trinitarian God is understood only in the expanse of the canonical narrative so the knowledge that the imago Dei is human identity becomes understood only through the expanse of the Scriptures as a whole. For instance, the notion of the image of God in Genesis 1, Peterson argues, is ambiguous as an isolated phrase but not in the context of the creation narrative. God first decides to create a creature that will represent Him and then humanity is made as that creature bearing His image. "The various powers and attributes belonging to humanity follow from God's determination that humanity will be God's image" (p. 69).

Peterson, like Kilner, repositions the common functionalist claim that to be in the image of God is to stand as representative for God. Breoth take issue with the notion that this representation is subsumed by the rule over creation. Rather the dominion function is just one of the many ways that unfold in Scripture in which the human imago Dei identity leads to humanity imitating God (p. 104). Thus, the imago Dei unfolds throughout the Canon including the perfect imaging of God by Jesus whom His followers are called to imitate.

While such proposals circumvent some of the issues arising with the three major approaches and invite connection with the whole of the canonical narrative and numerous areas of theology, reviewers have raised concerns about

them. McKirkland (2015) that unresolved issues about the nature of human personhood, what happens to the image of God during the intermediate disembodied state after death and before the resurrection, or about how predestinarians should understand the image of God in those whom are not predestined to be conformed to the image of Christ arise from proposals such as Kilner's. Lysen (2017) notes that Peterson's account assumes an idea that the human identity "is inalienable yet unrealized" (p. 119). Peterson appreciates the teleological notion in Irenaeus that humans were not created originally in their final state but rejects Irenaeus' idea that imago Dei is only a potentiality in Eden. But by granting that the humans do not perfectly reflect God at present or that the imago Dei is to be equated with a kind of potentiality, Peterson leaves unexplained how the imago Dei is now present only to a degree and yet equally possessed by each human.

A criticism of the relational view is that it is an anachronistic reading to see the imago Dei as an analogy between human and Trinitarian relationality in Genesis. Would it not be anachronistic as well to understand the Genesis 1 use of the image of God phrase as referring to our telos in Christ? Kilner (2015) makes a case that because the author of Genesis does not stop to explain what is meant by *tselem*, it is reasonable to assume the author intended it in an ordinary and conventional way. The Christological telos would not have been obvious to the author or the author's audience when Genesis was written. Similarly, Peterson's (2016) account requires the benefit of the whole Canonical narrative to understand the breadth of the imago Dei. Even if we just limit ourselves to the understanding of the imago Dei in the creation narrative on Peterson's terms retrograde theological impositions may be needed. What basis is there to assume that the Genesis author understands the dominion charge just as a consequence of humanity's identification with the imago Dei but not as its definition? Despite their canonical, synthetic, and systematic value, such approaches may leave unanswered the more particular exegetical question of what presumptively clear contemporaneous meaning would have been intended by the author of Genesis in describing

humanity as made in the image of God.

Another approach to understanding the imago Dei is to adopt a multifaceted or eclectic view that attempts to draw from all of the influential views (Grentz, 2001, Hoekema, 1986, McMinn & Campbell, 2007). Hoekema argues that the notions of structural capacity, function and relationality are interwoven in various Biblical conceptions and each one captures some aspect of the imago Dei. Building on this notion, McMinn and Campbell (2007) relate each of the three views as a theological integrative framework for different psychotherapy orientations. While many commentators find valuable insights offered in different views, they often attempt to reframe the insights in light of their own dominant paradigm about the imago Dei. If none of the views have demonstrated veracity, such eclectic approaches may constitute a leaky bucket fallacy (i.e., when multiple faulty theories are combined they do not automatically fix each other's flaws so the composite may not "hold water" any better than the theories in isolation). An argument for the validity of the composite is needed that shows how the individual flaws in the component parts in isolation are no longer an issue for them in combination.

Constitution & the Imago Dei

The issue of the human constitution or human ontology is one of specifying what "makes up" human beings (Churchhouse, 2017, Erickson, 2013). This is an equally challenging topic in theological anthropology that can be commingled with how the imago Dei is understood. Those who hold particular ontological views of the person, such as the substantive view that humans are souls, have often then read that ontological emphasis back into their understanding of the imago Dei. Dorman (2001) notes that "throughout the history of Christian doctrine the majority of theologians have defined the imago dei as relating to the faculties of the human soul common to all human beings" (p. 109). But as Churchhouse (2017) observes:

.... imago Dei studies and human constitution doctrine are distinct anthropological areas. The first arises from the phrase in Genesis 1, which emphasizes the identity and (teleological) purpose of humanity, so theologically, it is right to



say that humans are relational beings, and that is what it means to be human (made to relate to God, to each other, and to the rest of creation). But the ontological question of what a human is constituted of is different and gets little to no explicit attention in the theological flow of the Biblical imago Dei texts (even if a certain metaphysical view would be assumed). In effect, imago Dei studies (from within the wider framework of Genesis 1 and 2) are addressing the questions ‘who’ and ‘why’ is humanity. Human constitution is addressing the question of ‘what’ is humanity... (p. 283).

The ontological question will be addressed below to position the metaphysical framework for introducing the relevance of embodied cognition studies to our thought about the imago Dei. Surveys of anthropological ontologies in theology usually describe three basic views on the issue: trichotomism, dualism and monism (Boyd & Eddy, 2002, Dorman, 2001, Erickson, 2013, Feinberg, 2017). Trichotomism is notion on that humans consist of three substances or other ontological categories: a physical body, a psychological/mental soul, and an immaterial spirit. On these models, animals and humans are often both thought to share soulish qualities differing in some instances only by degree. Yet any third component, most often identified as the spirit, is frequently asserted to be a unique attribute of humanity among earthly creatures. Dualism sees spirit and soul as roughly synonymous, both referring to the immaterial part of persons, and the body as the material part. Dualism has been the predominant theological view throughout most of Christian history (Erickson, 2013). Monism holds that we exist as unitary physical beings. The soul/spirit is a property or characteristic or function of the body not a separate substance or element.

These theological views often are approached both philosophically, engaging perennial issues in philosophy of mind, and through exegetical treatments that attempt to demonstrate which view most aligns with Biblical theology (Moreland, 2009, 2014; Moreland & Rae, 2000; Robinson, 1952). It should also be noted that the three-category classification of these theological ontologies conflates a number of distinct perspectives. For instance, dualism has been

advanced in Thomistic, Cartesian interactive, holistic, and emergent forms (Cortez, 2010). While dualism has fallen out of favor in the post-Darwinian and current neuroscience era for many scientists and academics, most philosophical rejection of dualism has been aimed at its Cartesian varieties (Churchhouse, 2017, Cortez, 2010, Damasio, 1994). The common-sense intuition that we are both mental and physical has been a large factor in support dualism’s enduring appeal in traditional and folk thought. Biblical and theoretical critiques of dualism have also claimed dualism assumes a faulty view of the mental life. The stereotypic view of dualism attacked by its critics shares the following tenets: the mind and body are distinct types of substances that causally interact; the mind is the seat of consciousness, not the body; conscious thought can occur without the body; personal identity (i.e., that which defines and makes a person the same person across time and space) does not depend on the body, and the conscious mind is a characteristic of the immaterial soul.

Against such a view, Yong (2007) emphasizes the holistic and embodied presentation of humanity in Genesis and views it at odds with the fragmented view of the person he sees in dualism thus raising the common anti-dualist problem of embodiment. Other challenges for stereotypic dualism include the problem of interaction (how can a non-material/ non-temporal/ non-spatial substance interact with a material one extended in space-time), and the „mind of the gaps“ problem (Lavazza & Robinson, 2016). This latter problem arises from the growing success of neuroscience in explaining various features and processes of cognition in terms of biocognitive process. For instance, findings such as the localization of specific mental faculties or features to specific brain areas make plausible a reduction of the former to the latter for a large swath of cognitive scientists (Churchland, 2013).

The momentum of reductive naturalism in neuroscience, psychology and other fields has been reflected in the shift away from dualism in recent centuries among scholars of various fields. But despite its unfashionable current standing, influential defenses of varieties of dualism con-

tinue to be mounted in philosophy (Lavazza & Robinson, 2016), philosophical theology (Moreland, 2009, Moreland & Rae, 2000, Swinburne, 2013), and theology (Cooper, 2000; Loftin & Farris, 2018).

Many contemporary defenses of dualism take pains to distinguish themselves from the Cartesian stereotype in favor of what Cooper (2000) calls a holistic dualism. Cooper argues that “a holistic-dualistic anthropology is not obviously incompatible with the findings of establishment science or with various contemporary approaches to philosophy” (n.p.). Similarly, Erickson (2013) concludes that “The full range of the Biblical data can best be accommodated by the view that we will term “conditional unity.” According to this view, the normal state of a human is as an embodied unitary being. In Scripture humans are so addressed and regarded. ...this monistic condition can, however, be broken down, and at death it is, so that the immaterial aspect of the human lives on even as the material” (n.p.). Even those defending contemporary varieties of Cartesian substance dualism (viz., Swinburne, 2013) allow for holistic emphases about the human person.

In the mid-1980's, I was able to set up a debate on the mortality of the soul between a visiting professor, Antony Flew, and Richard Swinburne for the philosophy department at Bowling Green State University. Both had given Gifford lectures that decade from opposing perspectives: Swinburne advocated a dualist view that argued the soul continues past death and Flew defended an atheistic perspective that denied a soul distinct from the body that could survive death. In 2007, Flew published a text that made media headlines, reporting that after years of prominently defending atheism, he now believed in a God along deist or Aristotelian lines. In a personal conversation, shortly after the book's publication, Flew informed me that although he had come to believe that an intelligent agent had a hand in the creation of the universe, he continued to believe in the mortality of the soul. While some had uncharitably charged that Flew was just trying to purchase afterlife fire insurance as he was getting on in years, Flew quipped it would do no good since he did not believe he would survive death.

From Swinburne, I had come to appreciate the cogency of arguments against reductionism even in this age of neuroscience. From the debate, I learned how connected are issues of post-death survival of the person and the stand one takes on human constitution. As Cooper (2000) has passionately argued, monistic physicalism has great difficulty accounting for an intermediate state of persons after death. While some Christian monists have attempted to argue that forms of non-reductive physicalism are not defeated by the problem of personality identity (viz., Murphy, 2006), this remains a point of contention (Loftin & Farris, 2018). Issues of personal identity may also be a challenge even for monists that allow for resurrection. Consider the following hypothetical: imagine that a clone of Jones was created while Jones is still living. In this case, the clone method allowed a clone to be made with the same phenomenal field, memories, apparent age, and otherwise identical appearing body up to the moment of the clone's creation. Imagine also that clone was made while the Jones was under general anesthesia. Now its just so happens that both the original Jones and the clone of Jones (e.g., c-Jones) became conscious in the room simultaneously without any indication of who was Jones and who was c-Jones. Through a mishap of process, even the inventors had no way of knowing. Both believe themselves to be Jones but which of the two now is Jones?

Would not any model of personality identity that equates personal identity with some functional mental state (i.e., continuity of memory) or pattern of relationship, or other such functional states or patterns be incapable of providing an answer? A materialist might argue that they are not the same person only because they did not both possess the same physical body that was the body of Jones prior to the cloning (although no one may now be able to tell the real Jones from c-Jones). Non-reductive physicalists, such as Murphy (2006), have often argued that it is some group of emergent functional properties that make a person who they are and not a continuity of substance. This allows them to make a case that their form of monism is compatible with Christian ideas of survival past death through resurrection. Yet in our example,

both Jones and C-Jones have the same functional properties. Would such an understanding of personal identity not commit us to asserting that both could be the very same person at least at the moment of the creation of C-Jones? It is beyond the scope this present work to flesh out the problems that arise for moral responsibility and agency from a model of personal identity that allows two distinct individuals to be the same person. I will herein state only that I think any theory of personal identity that allows two distinct individuals to be share the same identity likely functions as a *reductio ad absurdum* for such a model of personal identity.

The non-reductive physicalists problem of personal identity noted above presents similar challenges for the Christian doctrine of resurrection. Consider what happens when Jones dies. Let us assume that a person is resurrected who believes themselves the same Jones that had once been cloned. Jones appears to have an body that nevertheless seems like the body possessed prior to death apart from some miraculous upgrades. Further assume that the resurrection occurred some many centuries after the death and the prior body had long sense decayed. The matter from the decayed body had long since reentered the biosphere and in the course of the life cycle been a part of the bodies of multiple organisms, including some people who are also now being resurrected. Thus, resurrection could not be simply reanimation of the same physical system that constituted Jones' body while alive. Yet, if the resurrected body is merely a replica of the pre-death body that Jones remembers having, how would it be the same „person“ in resurrection as the one who existed previously? Let's suppose resurrected Jones thinks they are the same Jones that existed pre-eschaton because of a continuity of memory, relationship, moral self-understanding, and spiritual inclinations, in a physically recognizable body. How would resurrected Jones be the same Jones that had died any more than the physically indiscernible pair created by cloning are the same person?

Such thought experiments have left me convinced that there must be something more than merely a bundle or memories, narrative states, reanimated bodies, or duplicated bodies for the

same person to survive death through resurrection. The intuitive option that seems ready made to be this something more is that humans must have an essential component responsible for their identity over time that endures beyond death.

Physicalist critiques of dualism have often charged that it fails to appreciate the substantial developments in neuroscience and embodiment theory that demonstrate how constituted and conditioned our minds are by our bodies (Varela, Thompson, & Rosch, 2017). Yet, there are key features of our existence that this remarkable body of work leaves unexplained. David Chalmers (1995a) referred the explanatory gap for physicalism as the hard problems of consciousness. The more we discover about the brain and mind, he observed, the more it seems clear that we are no closer to answering the hard problems of consciousness than before the age of neuroscience. Chalmers (1995b) explained: ““The really hard problem of consciousness is the problem of experience. When we think and perceive, there is a whir of information-processing, but there is also a subjective aspect. ...there is something it is like to be a conscious organism. This subjective aspect is experience. ...”

This “subjective aspect” of experience refers to various introspective observations that resist naturalistic reduction including: the unity of experience, the subjective experience of what is like to have an experience of something (i.e., qualia), or even the experience of conscious awareness itself. Neuroscience has made great strides in informing us about how the contents of consciousness can be populated and shaped by our bodily processes and structures and in identifying neural correlates of conscious experience. Recently, network neuroscience has been offering increasing promise at decoding the modular structure of entire cognitive systems and detecting their brain correlates (Bertolero et al., 2018). But none of this explains how our subjective and holistic awareness of that bodily input comes about.

Consider visual recognition of a person. We know light is transduced into neural impulses and we know something about how different regions of the visual cortex differentially contri-

bute to aspects of our experience such as facial recognition, name recognition, or distance perception. We know something about how speech is transduced and then the resulting neural impulses are routed to different brain areas resulted in discrete aspects of auditory perception. Yet it is not clear how all of these discrete activations are ever reunited into a molar gestalt field that is one integrated consciousness including speech, sound, meaning, narrative location, etc. This is known as the “binding problem”. It is as if the body is equipped to break the world down into a neural code in an analogous way to how a web camera converts photo-acoustic energy into digital information. But in the case of the brain, there does not seem to be a monitor connected to the systems. There is no clear structure or connected process that is home to a unified and re-integrated field that just is our wholistic, unified perception. We can and have used computer programs and imaging technology to begin to reconstruct the brain’s code and allow us to see on a computer screen what the person is perceiving. But as of yet, how the brain itself does this full reconstruction to produce a holistic, unified phenomenal field remains as mysterious as ever. There simply does not appear to be a brain network or system that accomplishes the full binding job required to explain the „consciousness screen“ self-evident to human perceivers.

Even if a consciousness screen were to be identified in the brain it is not at all clear that we would be closer to explaining the hard problem of consciousness. We would still need to show how having a conscious screen explains the first-person awareness we experience. Whence arises the conscious screener? - a person who is consciously aware of the phenomenal field present in the screen. The situation is analogous to a computer monitor playing a reconstructed image from signals sent to it by the computer with a camera attached while no one is there to watch it. It is irrelevant for this problem if the computer is doing something with the information it receives from a camera or other type of input device. If the computer was programed to run various operations such as making one’s breakfast by a certain time of day utilizing environmental input sensors and robotic attach-

ments, it would do this whether the monitor was on or not. Consequently, the mere observation of self-regulatory behavior in any system does not prove intentionality or awareness. All cybernetic systems have reciprocal self-response capabilities, whether they are living organisms or mechanical devices. A simple thermostat functions cybernetically in this way. It monitors temperature and if the air temperature deviates from a set point it will trigger a heater to turn on or off as needed to maintain the temperature. But few would suggest such mechanical devices are aware of their cybernetic processes or states simply because of this reciprocal self-response loop. How would there be anyone home in such a device?

Searle’s (1980) Chinese room thought experiment challenges the notion that artificially intelligent systems could ever be truly conscious. In this thought experiment, a person works in a windowless room with the job of writing Chinese characters on output cards in response to Chinese characters on input cards received through a slot. The person in the room does not understand any of the Chinese characters but has a rule book so well designed that it shows what characters to write for any particular input sequence. If the rulebook was so well developed that the output convinced the Chinese recipient that their meaning was understood and meaningful responses were given, the characters received or written would still have no meaning for the person inside the box. The person in the room would only be following syntactical-structural rules and what they perceived as the inputs or the outputs during the transaction would be devoid of semantic meaning for them. Searle claims this illustrates what happens with AI’s and thus suggests that no matter how sophisticated their programming they will never have subjective meaning in their operations. Scholars such as Chalmers (2016) and Nagels (2012) have given up hope that the hard problems of consciousness can be solved through reductive naturalism. In Chalmer’s (2016) case, he has increasingly defended a form of panpsychism: “the thesis that some fundamental physical entities are conscious: that is, that there is something it is like to be a quark or a photon or a member of some other fundamental physical

type" (p. 19).

A major part of the case for Christians repositioning theological anthropology on physicalistic grounds has been the supposed success of neuroscience in thus explaining consciousness. Yet now key pioneers in the search for the neural correlates of consciousness, such as Koch or Chalmers, have viewed the physicalist paradigm as inadequate to explain the hard problems of consciousness. They have increasingly moved to positions such as panpsychism although some prominent neuroscientists have long embraced dualism as part of their explanatory framework (e.g. Penfield, Eccles). Given this, is there not *prima facie* justification for a return to a Christian anthropology that explores the implications of a neuroscientifically informed philosophy of mind that holds the modal metaphysical ontology of historic Christianity as a live option? The traditional idea that only a subset of substances, identified here in a rough and ready way as spiritual substance, is inherently minded. Why would not this common idea from Christian thought solve the hard problem of consciousness, explaining from whence arises the ground of conscious awareness? Further would it not do so without committing to a counterintuitive notion that all matter may be conscious. If humans do consist of a minded or protominded substance in close combination with material body, despite the embodied intermingling of those two ontological categories into a unified experienter fueled by bodily influences, then what might this say about how we possess the *imago Dei*?

Embodied Cognition: Substance, Function, Relation & Telos

Cognitivism has held sway in cognitive science for decades. This is the view the human mind works as an information processing system similarly to how a computer does (Galetza, 2017). In recent decades, an alternative paradigm to cognitivism has begun to take shape in psychology. It is referred to as the embodied mind thesis. Rosch, Thompson, and Varela (1992) explain: "By using the term embodied we mean to highlight two points: first that cognition depends upon the kinds of experience that come from having a body with various sensorimotor

capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological and cultural context" (pp. 172–173). The embodied mind thesis has been developed in multiple domains of psychological science including the psychology of language and the field of perception studies. A classic debate in the psychology and philosophy of language over how language and thought are related (Shapiro, 2011). Does language depend on thought, vice versa, or are they perhaps independent systems? The embodied thesis in linguistics more closely connects thought and language to sensorimotor aspects of our knowledge. Lakoff, trained by Chomsky from a cognitivist framework, came to reject that cognitivist perspective because of the extent to which our thought is shaped by our bodily existence (Lakoff & Johnson, 1980). For instance, our images of being in control frequently reference the one in control being in the upward relation (i.e., "I'm on it" or "He's under my control"). Research has provided support for the embodiment thesis but not invariantly so. Galetzka (2017) notes fMRI studies that seeing action words produce corresponding activations in the pre-motor and motor areas without actual movements. Yet this motor area activation is not always present when motoric metaphors or idioms are used. Aziz-Zadeh and Damasio (2008) suggest that when motor metaphors become very familiar they may be represented in different brain areas from the sensorimotor areas more implicated in novel exposure. In the field of perception psychology, top-down models have emphasized the constructive nature of perception that shape our sensory inputs into meaningful percepts based on cognitive processes such as primed schemas or expectancies. A distinct tradition emphasizes how the sensory system determines perception in direct contact with the world from the bottom up. Gibson's (1966, 2015/1979) ecological model of perception represents such an approach. Taking inspiration from 18th century philosopher Thomas Reid, Gibson defended direct realism about at least some sense perceptions. He argued that constructivism placed too much emphasis on the mental and not enough on the constraints of the environment in shaping our perceptions.



Over 50 years of studying visual perception, he amassed considerable experimental evidence that the ambient optical array made possible and constrained a number of the visual perceptions we have. In contrast to the constructivist, he suggests "...the senses can obtain information about objects in the world without the intervention of an intellectual process..." (Gibson, 1966, p. 2). For example, texture gradients naturally arise in visual perception with closer objects having more detail and farther away objects have less fine detail triggering an immediate relative recognition of distance.

The theory of mind refers to how we form beliefs and perceptions about what other people are seeing or experiencing (Baron-Cohen, Tager-Flusberg, & Lombardo, 2013). Two major alternative views of how we form a theory of mind are the inferential view and the simulation views. The inferential view construes our belief formation processes about other minds as an intellectual judgment utilizing our higher cognitive faculties. The simulation view posits that when watching others express emotion or perform actions, we "read" their mind by having the emotion and motor pathways covertly activated that would be required if we were expressing or doing the same thing. Our ideas about the minds of others form, on this view, through a kind of experiential resonance or spontaneous mental imitation.

In 1992, Iacomo Rizzolatti and his colleagues of University of Parma discovered motor neurons that would fire both when a monkey grabbed an object and when it would observe others doing the grasping. These neurons have become labeled "mirror neurons". The discovery provided strong evidence in support of a simulation theory of mind. We grasp the mental life behind another's actions or expressions by perceiving not only what they are doing but why they are doing it. Activations of our cortical motor areas occur as if we were doing the action but also activations occur in relevant emotion areas and in prefrontal regions related to goals that direct behavior. Imitation includes the potential to adapt the action sequence one is observing so when self-performed it achieves the same goal (Iacoboni, 2008).

So, there is good reason to think now that si-

mulation plays a significant role in our social cognition and our self-understanding as intentional agents but does this mean that there is no room left for cognitive inference? Saxe (2009) has summarized data that both simulation and inferential routes seem to play roles in our theory of mind formation.

Imago Dei and Embodiment

We now bring our discussion back to the imago Dei. As we noted earlier, some have objected to dualism because they believe this contrary to the embodiment of persons implied by Old Testament anthropology and to the explanatory potency of physicalist neuroscience. Contemporary neuroscience has given us good reason to suspect that we are not just pure cognitive beings who observe and perceive what happens in our body, and in the world around us, but that our thinking is constituted in some direct ways by our sensory encounter with the world, others, and the bodily condition of our existence. Yet, contrary to common stereotypes, dualism does not require one to underappreciate or reject even a rather strong view of embodiment. Yet it also accounts for those aspects of Christian thought that point to something more than our current body or its functions as essential to who we are. The Biblical record and traditional theology assert at least some minds are not physical (viz., God) and that humans may even literally be the sort of being that can exist in a state that is "absent from this body" (2 Cor 5:8). Various Biblical portrayals of this intermediate state suggests it is not a complete or normal state of being for humans although it is sufficient for some conscious experience, perception, interaction and maintained personal identity (Cooper, 2000). Unlike Platonic dualism, traditional Christian accounts do not see this immaterial state as natural or complete and presents the normal and eternal state of humans as resurrected in incorruptible embodied states (1 Cor. 15:44ff).

What would an integrative view that embraces these traditional Christian beliefs and also finds insight about human functioning in cognitive neuroscience suggest about the imago Dei? Humans are the sorts of beings that have a non-material essence to their identity that persists beyond death, disembodiment and re-embodi-

ment. This seems to resonate well with traditional substantive views of the imago Dei although I am not here suggesting that understanding was the intended meaning of the imago terms in Genesis 1 simpliciter.

Still, humans are not just enduring spirits who are coincidentally embodied. As Biblical theology and contemporary neuroscience have both argued, our conscious mental life is constituted, constrained and made possible to a substantial degree by our embodied condition. Our embodied cognition works in such a way that we are unavoidably in relationship to others. We “walk in others’ shoes” mentally and emotionally to some degree just by observing them. We form our self-understanding and acquire competencies in the world by imitating others. Thus, as constituted, humans are inherently relational beings.

Still humans are not just enduring spirits who in their embodied constitutions are also relational beings. We were created to represent a supremely relational and morally perfect being. We serve this function of being God’s icon before a watching world now with various degrees of realization, as the indwelling Spirit bears fruit allowing us to imitate Christ (1 Peter 2:21) and others ahead of us on the pilgrim’s trail (1 Cor 11:1). Because imitation works not as mere mimicry but by grasping intention-action-to outcome sequences, with the Spirit’s indwelling and sanctifying presence, we may begin to walk as He walked with a renewed mind (Romans 12:2).

If a so positioned integrative understanding of the imago Dei subsumes aspects of all of the three major views, does it avoid their pitfalls alleged by Kilner (2016)? What of the unregenerate who will not move towards a realization of the perfect image of God seen in Jesus? What of those who have disorders that in some way interfere with the realization of some facets that reflect what God intends us to reflect? All of us are imperfect reflectors of the divine radiance in this pre-glorified and fallen state. But any person may be on the path towards reflecting the image of Christ more fully. Even if some seem so impaired or so marred by the effects of sin that God’s glory does not seem in any way present within the earthen vessel, who are we

to judge what God can do, or may already be doing, within that person’s telos?

Some of us will not move eternally on a telos that realizes that image. But this side of the eschaton, what human can separate the wheat from the tares without risking throwing out the wheat? It is an act of sinful hubris for Christians to think themselves superior to others in realizing the image or likeness of God or to view others as hopelessly having lost the imago Dei because a particular subset of characteristics that we have focused on appear lacking. There is no warrant for us to make such judgments. By abiding in the life of the Spirit, God has provided the way for the redeemed to be conformed into His image. To encounter Jesus in the Gospels is to be confronted with just how many areas that implicates for our needed transformation. The telos of the embodied Christian this side of the intermediate and resurrected state is to live in the body of Christ in a unified community realizing the divine image to a sufficient degree so that the world may know the Father sent the Son (John 17:21).

References

- Augustine (2002). *On the Trinity* (G.B. Matthews, Ed). Cambridge: Cambridge University. (original work published 400).
- Aquinas, T. (2010). *Summa Theologica*. [Kindle DX version]. Retrieved from www.amazon.com. (Original work published 1265-1274).
- Aziz-Zadeh, L., & Damsio, A. (2008). Embodied semantics for actions: findings from functional brain imaging. *Journal of Physiology-Paris*, 102 (1-3), 35-39.
- Baron-Cohen S, Tager-Flusberg H, Lombardo MV, (eds.)(2013). *Understanding other minds: Perspectives From social cognitive neuroscience* (3rd ed.). Oxford University Press
- Barr, J. (1968). The image of God in Genesis-A study in terminology. *Bulletin of the John Rylands Library*, 51, 11-26.
- Barth, K. (1958). The doctrine of creation. In G.W. Bromley & T.F. Torrance (Eds), *Church dogmatics*, 3 (pt 1). Edinburgh: T & T Clark.
- Berkouwer, G.C. (1962) *Studies in dogmatic. Man: The Image of God*. Grand Rapids, MI: Wm. B. Eerdmans.
- Bertolero, M. A., Yeo, B. T. T., Bassett, D. S., & D’Esposito, M. (2018). A mechanistic model of connector hubs, modularity and cognition. *Nature Human Behaviour*, 2(10), 765-777.
- Boyd, G.A., & Eddy, P.R. (2002). Across the spectrum: Understanding Issues in Evangelical theology. Grand Rapids, MI: Baker.
- Bray, G.L. (1991). The significance of God’s image in man. *Tynale Bulletin*, 42(2), 195-225.
- Briggs, R.S. (2010). The image of God and other things Genesis does not make clear. *Journal of Theological Interpretation*, 4 (1), 111-126.
- Brueggemann, W. (1982). *Genesis: A Bible commentary for*

- teaching and preaching. Atlanta: John Knox.
- Chalmers, D. (1995a). The puzzle of conscious experience. *Scientific American*. 90-100.
- Chalmers, D. (1995b). Facing up to the problem of consciousness. *Journal of Consciousness Studies*, 2, 200-2019.
- Chalmers, D (2016). Panpsychism and panprotopsychism. In G. Bruntrup & L. Jaskolla (Eds.). *Panpsychism: Contemporary Perspectives*. (pp. 19-47). New York: Oxford University.
- Churchhouse, M.J. (2017). Renewing the soul: Towards an enhanced Pentecostal theological doctrine of human constitution. Doctoral dissertation.
- Churchland, P.M. (2013). *Matter and consciousness* (3rd Ed.). Cambridge, MA: MIT.
- Cooper, J.W. (2000). *Body, Soul and Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate*. [Kindle DX version]. Retrieved from www.amazon.com.
- Cortez, M. (2010). *Theological anthropology: A guide for the perplexed* [Kindle DX version]. Retrieved from www.amazon.com.
- Crouch, C.L. (2010). Genesis 1:26-27 as a statement of humanity's divine parentage. *Journal of Theological Studies*, 61, Pt 1, 1-15.
- Damasio, A. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: Putnam.
- Dayringer, R. (2012). The image of God in pastoral counseling. *Journal of Religion and Health*, 51, 49-56
- Dorman, T.M. (2001). *A faith for all seasons: Historic Christian belief in its classic expression* (2nd Ed.). Nashville, TN: Broadman & Holman.
- Drever, M. (2013). *Redeeming Creation: Creatio ex nihilo and the Imago Dei in Augustine*. *International Journal of Systematic Theology*, 15 (2), 135-153.
- Erickson, M.J. (2013). *Christian theology* (3rd Ed.). Grand Rapids, MI: Baker.
- Galetzka, C. (2017). The story so far: How embodied cognition advances or understanding of meaning-making. *Frontiers in Psychology*, 8, Retrievied from <https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01315/full>
- Gibson, J.J. (1966). The senses considered as perceptual systems. Houghton Mifflin.
- Gibson, J.J. (2015). The ecological approach to visual perception. [Original work published 1979]. New York: Taylor & Francis.
- Grenz, S.J. (2001). *The Social God and the relational self- A Trinitarian theology of the Imago Dei*. Philadelphia: Westminster,
- Hoekema, A.A. (1986). *Created in God's image*. Grand Rapids, MI: Wm. B. Eerdmans.
- Iacoboni, M. (2008). *Mirroring people: The new science o how to connect with others*. New York: Farrer, Strauss, & Giroux.
- Kilner, J.F. (2015). *Dignity and destiny: Humanity in the Image of God*. Grand Rapids, MI: Wm. B. Eerdmans.
- Krause, D. (2005). Keeping it real: The image of God in the New Testament Interpretation, 358-368.
- Lakoff, G., & Johnson, M. (1980) *Metaphors we live by*. Chicago: University of Chicago.
- Lavazza, A., & Robinson, H. (Eds.)(2016). *Contemporary Dualism: A Defense*. New York: Taylor & Francis.
- Lints, R. (2015). Identity and idolatry: The image of god and its inversion. Downers Grove, IL: Intervarsity.
- Loftin, R.K., & Farris, J.R. (Eds.). (2018). *Christian physicalism: Philosophical & theological criticisms*. Lanham: Lexington Books.
- Lysen, L.M. (2017). [Review of the book *The imago Dei and hu-* man identity: A theological interpretation by R.S. Peterson] *International Journal of Systematic Theology*, 19 (1), np. Retrieved online at <http://onlinelibrary.wiley.com/doi/10.1111/ijst.12201/pdf>
- Macdonald, N. (2008). The Imago Dei and Election: Reading Genesis 1:26-28 and Old Testament Scholarship with Karl Barth. *International Journal of Systematic Theology*, 10 (3), 303-327.
- McGrath, A.E. (2017). *Christian theology: An Introduction* (6th ed). Malden, MA: Wiley Blackwell.
- McKirlan, C.L. (2015). [Review of the book *Dignity and destiny: humanity in the image of God* by J.F. Kilner]. *Priscilla Papers*, 29 (4), 27-28.
- McMinn, M., & Campbell, C. (2007). *Integrative psychotherapy: Towards a comprehensive Christian approach*. Downers Grove, IL: InterVarsity Press.
- Miller, J.M. (1972). In the "image" and "likeness" of God. *Journal of Biblical Literature*, 91(3), 289-304.
- Moltmann, Jürgen (1993). *The Trinity and the Kingdom: The Doctrine of God*. Minneapolis, MN: Fortress Press. (Original work published 1981)
- Moreland, J.P. (2009). *The recalcitrant imago Dei: Human persons and the failure of naturalism*. London: SCM Press.
- Moreland, J.P. (2014). *The Soul: What it is and how we know it's real*. Chicago: Moody.
- Moreland, J.P., & Rae, S.B. (2000). *Body and Soul: Human nature and the crisis in ethics*. Downers Grove, IL: InterVarsity.
- Murphy, N. (2006). *Bodies and Souls, or Spirited bodies?* New York: Cambridge University Press
- Nagels, T. (2012). *Mind & cosmos: Why the materialist neo-Darwinian conception of nature is almost certainly false*. New York: Oxford University.
- Osborne, G.R. (2007). *The hermeneutical spiral: A comprehensive introduction to Biblical interpretation* (2nd ed.). Downers Grove, IL: InterVarsity Press.
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University.
- Peterson, R.S. (2016). *The Imago Dei as human identity: A theological interpretation*. Winona Lakes, IN: Eisenbrauns.
- Pryor, C.S. (2011). Looking For bedrock: Accounting for human rights in classical liberalism, modern secularism, and the Christian tradition. *Campbell Law Review*, 33, 609-640.
- Robinson, J.A.T. (1952). *The Body*. London: SCM,
- Rosch,E, Thompson, E., & Varela, F.J. (1992) *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, MA: MIT
- Saxe, R. (2009, January). Rebecca Saxe: How we read each other's minds https://www.ted.com/talks/rebecca_saxe_how_brains_make_moral_judgments
- Searle, J. (1980). Minds, brains, and programs. *Behavioral and Brain Sciences* 3, 417-424.
- Shapiro, L. (2011). *Embodied cognition*. New York: Routledge.
- Swinburne, R. (2013). *Mind, brain, & free will*. New York: Oxford University.
- Varela, F.J., Thompson, E., & Rosch, E. (2017) *The Embodied Mind: Cognitive Science and Human Experience*. Rev. Ed. Cambridge, MA: MIT
- Yong, A. (2007). *Theology and Down Syndrome: Re-imagining Disability in Late Modernity*. Waco, Texas: Baylor University Press.

Table 1

Theological Views on Imago Dei

	Substantive-Structural	Functional	Relational
Definition of View	The imago Dei is a quality or compacity of humans that reflects a quality or capacity of God such as possession of a soul, consciousness, reason, or volition/agency.	The imago Dei is a function of humans that reflects a function of God such as having dominion over creation.	The imago Dei is the relationality present in humanity reflecting the inherent relationality in the Trinitarian God.
Supporting Rationale	<ul style="list-style-type: none"> Most prevalent theological tradition until recent centuries. Imago Dei as soul provides strong basis for human equality despite differences in intellect or other characteristics. Bible appears to warrant view of humans as thinking, volitional agents with a spiritual capacity distinct from animals. 	<ul style="list-style-type: none"> God has authority over all creation. Various Scripture passages indicate that God grants to humanity authority over creation as well. This view provides a rationale for ecological concern and responsibility. 	<ul style="list-style-type: none"> Comports with social views of the Trinity. Consistent plural self-description of God as creator in Genesis 1. Image of God in man distributed to man as male and female.
Common Criticisms of View	<ul style="list-style-type: none"> Exegetically absent from Genesis 1:26-28 More consistent with Greek emphasis on rationality and immaterial souls than of Hebraic views. Emphasis on rationality reflects a patriarchal view that emphasizes reason over emotion or other characteristics. 	<ul style="list-style-type: none"> Little support in tradition. Teaching of the heretical Socinians. Genesis 1 describes humans has already made in God's image before introducing the dominion charge. 	<ul style="list-style-type: none"> Little support in tradition Requires an anachronistic Trinitarian reading of Genesis 1 rejected by most ancient and contemporary scholars. The view reflects an <i>eisegetical</i> insertion of contemporary existential thought into the text.
Proponents	Irenaeus Thomas Aquinas Milliard Erickson	Socinians Common view among contemporary Bible scholars	Jürgen Moltmann

Comment to “The Imago Dei Embodied Cognition”

by Roland Mahler (Switzerland)

The author starts out giving an overview of current historical and actual imago Dei concepts which show mainly three different aspects of understanding: The substantive or structural approach which focusses on man's individual constitution as a soul-gifted being an as such (for Augustine) reflecting the holy trinity in his ability to remember (memory), to think (intellect) and to want (volition), the functional understanding as the prerogative of man's role in creation as god's agent and caretaker of the world and as a third aspect the relational view of man being the image of God in his social behavior. All of these conceptions offer enough possibilities for a critical offence (i.e. all of these imago Dei based human attributes can be abused – and they were abused!). Although they were and still are well established in christian history of theology.

Beside the three main aspects in understanding the imago Dei-theologoumenon of christian anthropology there are other positions to consider. Hathaway mentions the «non-attributional view» of McKirkland (meaning that imago Dei is just a chiffre for man's meaningful reflection on God) and Peterson's identity concept which defines imago Dei as the unique identity given to man by his creator. Both of these positions (as a critical proposition of Hathaway) seem to represent a kind of functionalist understanding: Man is creation's conscience regarding and reflecting the creator. But what makes them interesting is their focus on man's potential. To be the image of God is a potential to be realized by human development.

Eclectic views that try to combine aspects of all understandings cannot rely on a better result than any single position, because the the faults of this one will not necessarily be amended by the other. That's what Hathaway rebukes to va-

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Former articles by Roland you can see here:
<http://emcapp.ignis.de/2/#/116>
<http://emcapp.ignis.de/4/#/52>
<http://emcapp.ignis.de/9/#p=42>

rious attempts like the one of Hoekema. The next unit of the Hathaway's text deals with anthropological ontologies as found in christian theology (trichotomism, dualism and monism). He refers to Churchhouse who says that image Dei studies and human constitution are distinct anthropological areas. So one should not mingle the two in order to keep a clear view on the constitutional question: What is humanity? Is it mental or is it physical and is there any difference at all between these areas? Classical dualism has lost acceptance since materialistic science has taken over to explain the world. Though this tendency to a reductive naturalism has grown over the decades there still are various defenses of dualistic aspects in a holistic view in anthropological philosophy and theology.

One crucial question (also discussed by Hathaway) is : What makes one human individual or

existence (even if t was a cloned one!) different or singular compared to another? Anyway, there is a subjective aspect as an individualistic experience of being oneself. This is nothing less than the physically and philosophically hard problem of consciousness. Here Hathaway finally comes in with the thought of embodied cognition which connects to different embodied mind theories (Shapiro; Lakoff; Gibson, Baron-Cohn). The result of all seems to be, that there is no absolute human mind but a mindset that is formed by different physical functions and interactions. But still there remains a residual unit of human consciousness which can

be addressed as imago Dei and stands for what cannot be explained as the result of any physical (i.e. sensory) influence. This embodied but not physically caused cognition as part of human selfawareness has to be developed in a lifetime process.

Hathaway's essay gives an inspiring overview on the very core of christian anthropology and leads the readers view from traditionally preformed ideas to a more and more open horizon including all the aspects of modern philosophical and neuroscientific theories. Though the final conclusion is a bit disappointing (or at least not that spectacular) the whole discussion gives a positive approach to an imago Dei based and in the same time developmentally orientated christian anthropology which can be very helpful also in psychotherapeutic concerns. As a first step ahead the imago Dei concept could serve as an open process of defining each individual's own self in the image of the creator. Therefore Hathaway's discourse could be the beginning of further interdisciplinary considerations.

Ulla Dahlen (Finland)

The trauma of body and mind in female genital mutilation/ cutting (FGM/C): Christian anthropological and therapeutic perspectives

Ulla Dahlen is from a small town in Finland. Her educational background includes an MA in Counseling (Columbia International University, SC) and a PhD in Counselor Education and Supervision (Regent University, VA). While she lived and studied in the United States for over seven years, she worked and did clinical counseling internships at Christian Counseling Centers, at a local Church as well as a one year internship at a city hospital. Currently Ulla lives in Finland with her husband David. There she teaches counseling courses at Iso Kirja College and offers counseling workshops for local churches. In addition, Ulla and David serve part-time with a Mission Organization, Fida International. Ulla's responsibilities include member care for missionaries as well as teaching, training and consultation, mainly in various countries in Asia. In her free time Ulla enjoys reading, writing and spending time in the nature with David.

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Ulla Dahlen (Suomi)

Kehon ja mielen trauma naisten silpomisessa: näkökulmia Kristillisestä antropologiasta ja terapiasta



Ulla Dahlen on kotoisin pienestä suomalaisesta maaseutukylästä. Hänen koulutustaustansa sisältää muun muassa maisterin tutkinnon terapeuttisesta sielunhoidosta (MA in Counseling, Columbia International University, SC) ja tohtorin tutkinnon terapeuttisen sielunhoidon koulutuksesta ja työnohjauksesta (PhD in Counselor Education and Supervision (Regent University, VA). Asuessaan ja opiskellessaan Yhdysvalloissa reilun seitsemän vuoden ajan, Ulla työskenteli ja suoritti terapeutin työharjoittelua (Clinical counseling internships) kahdessa eri kristillisessä terapiakeskuksessa, paikallisessa seurakunnassa, sekä yhden vuoden ajan sairaalassa Columbiassa, suljetulla osastolla ryhmäterapien ohjausta avustaen. Tällä hetkellä Ulla asuu Suomessa aviomiehensä Davidin kanssa. Hän opettaa terapeutisen sielunhoidon kursseja IK-Opistossa ja tarjoaa terapeutisen sielunhoidon seminaareja paikallisille seurakunnille. Lisäksi Ulla ja David palvelevat osa-aikaisesti yhteistyössä Lähetyks - ja kehitysyhteistyöjärjestö Fida Internationalin kanssa. Ullan vastuualueisiin kuuluu lähettien hyvinvoinnin kehittäminen, koordinointi ja sielunhoitoterapia tarvittaessa. Hän myös opettaa, kouluttaa ja konsultoi terapeutisen sielunhoidon merkeissä lähinnä Aasian alueella. Vapaa-aikanaan Ulla nauttii lukemisesta, kirjoittamisesta ja luonnossa liikkumisesta Davidin kanssa.

The midday sun in Awasa, southern Ethiopia, was merciless. Dusty soil, thirsty cattle and weary faces were constant reminders of a life under harsh conditions. A Capacity Building training for women was under way, and I was trying to concentrate. An Ethiopian nurse was courageously speaking of harmful traditional practices. Suddenly my ears tuned in to a question by a workshop participant. A sweet-spirited Ethiopian mother appeared to struggle for words, as she stated,

-Why did you not come and tell us sooner? I had my daughter go through genital cutting only a few days ago.

I was stunned. Then I was quietly furious. She was a Christian. She was a ministry leader in her church. And she had just had her daughter go through genital mutilation.

The mother seemed genuinely confused and regretful once she realized the implications for her daughter. Her ache was as real as my anger. My stomach was churning. Christians did not do that, did they? Naively I had thought the answer would be in the negative. The brief encounter under the Ethiopian sun marked the beginning of a long personal journey for me.

Almost ten years had passed. I was living in the United States and conducting PhD research on female genital cutting. I had read numerous articles on the subject. Now it was time to learn to read human hearts by listening, watching and waiting. Telile, an Ethiopian-born nurse in her mid-fifties, paused to recall that fateful day. She firmly held her teacup and struggled to find words.

-I knew it was going to happen. That is why I refused and fought. I was very upset and they had to literally tie me down. I always remember that. I just visualize now when I see that moment when they cut me. And then that moment, when they tied me down. I was screaming and crying. I can still feel it. Not the pain, but I still feel. You remember in your ears what happened. Because they are cutting my body, they are cutting me. You don't have anesthesia or anything. They use something like razor. It is very painful, more than you can imagine. I could not forget it. How can you, it is your body? I don't think anybody would want to have that done. It is your body.

Keskipäivän aurinko Awasalla, eteläisessä Etiopiassa, paistoi armottomasti. Pölyvä maa, nälkäinen karja ja paikallisten uupuneet kasvot kielivät ankarista elinolosuhdeista. Naisten Kapasiteetin Vahvistamisen Koulutus oli juuri alkanut, ja yrityn keskittyä aiheeseen. Etiopalainen sairaanhoitaja puhui urhealla antaumuksella vahingoittavista heimotavoista. Yhden osallistujan kysymys sai korvani heristämään tavallista tarkemmin. Herttainen etiopalainen äiti yritti löytää sanoja kysymykseen,

-Miksi ette tulleet kertomaan tästä aiemmin? Tyttäreni silvottiin vain muutama päivä sitten. Olin hölmistynyt ja raivostunut sisäisessä maailmassani. Tämä äiti oli Kristitty. Hän johti naisten työtä seurakunnassa. Ja hän oli vasta antanut tyttärensä silvottavaksi.

Äiti vaikutti aidon hämmentyneeltä ja katuvalta, kun hän ymmärsi silpomisen seuraukset tyttärensä kehossa ja elämässä. Hänen kipunsa oli yhtä todellista kuin minun vihani. Vatsassani velloi. Eiväthän Kristityt tehneet tätä? Naiivisti olin ajatellut vastauksen olevan kielteinen. Lyhyt kohtaaminen Etiopian auringon alla oli ensimmäinen askel omalla matkallani naisten silpomisen maailmaan.

Lähes kymmenen vuotta oli kulunut. Asuin Yhdysvalloissa ja tein tutkimustyötä naisten silpomisesta väitöskirjaa varten. Olin kahlannut läpi lukemattomia artikkeleita asian tiimoilta. Nyt oli aika oppia lukemaan ihmissydänten kertomaan kuuntelemalla, seuraamalla ja odottamalla. Pääle viisikymmenvuotias etiopalainen sairaanhoitaja, Telile, pysähtyi muistelemaan tuota kohtalon päivää. Hän piti tiukasti kiinni teekupistaan ja yritti löytää sanoja tilanteen kuvaamiseksi.

-Tiesin, mitä oli tulossa. Siksi yrityn kieltäytyä ja taistella vastaan. Olin hyvin järkytynyt, ja heidän täytyi kirjaimellisesti sitoa minut kiinni, jotta pysyn paikoillani. Muistan aina tuon tilanteen. Edelleenkin näen silmissäni hetken, kun minua leikattiin. Ja sitten sen hetken, jolloin minut sidottiin. Huusin suoraa huutoa ja itkin. Tunnen sen vieläkin, en kipua, mutta muistan tilanteen tunteena. Muistan korvissani [kivuhuutoni], mitä tapahtui. He leikkasivat minun kehoani, he leikkasivat minua. Ei siinä käytetty anestesiaa tai mitään vastaavaa. He leikkasivat

(Dahlen, 2011, p.131, emphasis mine). For the first time, Telile broke the cardinal rule to remain silent about FGM. Her memories had been waiting for the floodgates to open, and she spoke for well over an hour. Telile could still hear in her ears the screaming of then a seven-year old girl, while her genitalia was being mutilated. Her father had tried to protect her, but grandmother orchestrated the inevitable while daddy was out of town.

Telile cringed. Her hands shook. Her normally quiet voice and gentle face expressed a myriad of emotions while she relived the horrific event in her mind.

Almaz, another research participant described a similar experience.

-There is so much pain, it is a pain inside. When you start talking about yourself, how it [FGM] happened, maybe it comes back.

Maybe it comes back.

As suggested by one of the world's leading expert's and researcher's on trauma, Bessel Van der Kolk, the human body keeps a score (Van der Kolk, 2015). The trauma experience of body and mind does return to the memory.

Female genital mutilation in a nutshell

The World Health Organization (WHO) estimates over three million girls to be in danger of FGM annually (www.who.int). While the practice has traditionally been associated with the continent of Africa, FGM takes place in the Middle East, Asia and among immigrants throughout the world. Anthropologists recognize variations as to the nature, age and type of FGM among different ethnic groups.

In general, FGM has been classified into four different types based on what and how much is cut. However, women may not know the type or extent of their genital cutting procedure (Obermeyer, 2005). Furthermore, the struggle of the girl who is being held down by force, the skill of the operator, and the sharpness of the instrument impact the extent of the operation (Kangoum et al., 2004). The operation usually takes place any time between the age of 40 days and young adulthood, depending on tribal practices.

A myriad of reasons are cited for the practice. Among them are purity, virginity, marriagea-

jollain partakoneen terän tapaisella. Se oli niin tuskallista, tuskallisempaa, kuin osaa kuvittella. En voi koskaan unohtaa. Kuinka voisim, se on oma kehoni? En usko, että kukaan haluaisi sitä tehtävän itselle. On kysymys sinun kehostasi. (Dahlen, 2017, s.88-89; Dahlen, 2011, s.131, kursivointi kirjoittajan).

Ensimmäistä kertaa elämässään Telile rikkoi kardinaalisäännön silpomista ympäröivästä hiljaisudesta. Muistojen tulva pääsi valloilleen, ja hän puhui tapahtumasta toista tuntia. Telile edelleen kuuli korvissaan silloisen seitsemänvuotiaan tytön kirkumisen samalla, kun hänen sukupuolielimiään silvottiin. Isä oli yritynyt suojella tytärtään, mutta mummo järjesti väähäämättömän tapahtuvaksi, kun isä oli kaupunkimatkalla.

Telile säpsähti. Hänen kätensä vapisivat. Telilen tavallisesti hiljainen ääni ja herttiset kasvot kielivät tunteiden kirjosta, jonka noiden kauhun hetkien muisteleminen nosti tämän hetken todellisuuteen.

Almaz, jota myös haastattelin, kuvaili samankaltaista kokemusta.

-Siihen sisältyy niin paljon kipua, sisäistä kipua. Kun alan kertoa itsestäni ja kuinka silpomiseni tapahtui, ajattelen, että ehkä se tilanne tulee takaisin.

Ehkä se tilanne tulee takaisin.

Bessel Van der Kolk, yksi maailman johtavista trauman asiantuntijoista ja tutkijoista mainitsee, kuinka ihmiskeho pitää traumasta kirja (Van der Kolk, 2015). Trauma, jonka keho ja mieli ovat kokeneet, palaa muistoihin itsepintaiseksi.

Tyttöjen silpominen pähkinänkuoreessa Maailman terveysjärjestö (The World Health Organization/ WHO) arvioi vuosittain yli kolmen miljoonan tytön olevan vaarassa joutua silvotuksi (www.who.int). Vaikka tapaa onkin perinteisesti harjoitettu lähinnä Afrikan mantereella, silpomista tapahtuu Lähi-Idässä, Aasiassa, ja joidenkin maahanmuuttajien harjoittamana kaikkialla maailmassa. Tutkijat tunnistavat eroavaisuuksia sen suhteen, kuinka ja milloin silpominen tapahtuu eri heimojen ja etnisten ryhmien keskuudessa.

Yleisesti ottaen, silpominen luokitellaan neljään eri kategoriaan riippuen siitä, kuinka paljon ty-

bility, tradition, societal pressure, community inclusion, religion and expectations for female behavior (Dahlen, 2011; Hernlund & Shell-Duncan, 2007). African immigrants in Sweden described the pressure as follows,

If you [are] in society, there is pressure. This just has to be done, [as] a duty to perform if you [are] to be in society. I mean, even if you are against it, it's hard to resist the pressure... They would be ashamed in their home countries if they had not undergone FGC (Johnsdotter et al., 2009, p.121; Berggren et al., 2006, p.55).

Largely because of the communal natures of the FGM-practicing societies, change is also taking place through educating and empowering whole communities, as reported from Oromia region in Ethiopia (Kassam & Lalise, 2006).

FGM has traditionally been located far away from the European and North American shores. However, the practice has found its way to both sides of the north Atlantic hemisphere. In a recent court case in the United States, two doctors in Michigan were found performing and assisting genital cutting surgeries (www.edition.cnn.com).

According to estimations, hundreds of thousands of women who live in the European Union have been subjected to genital mutilation. Furthermore, thousands of girls are expected to be at risk of FGM in the EU area (www.ec.europa.eu). Genital mutilation is a crime in the European Union.

Trauma of body and mind

The bodily trauma and medical effects of FGM have been well researched (Obermeyer, 2005). Immigrant research participants from Sweden and England (Kangoum et al., 2004; Morison et al., 2004) have reported "long-term urinary and reproductive effects, a post-operation fear of the scar re-opening, urinary track infections and painful menstruation" (in Dahlen, 2011). The World Health Organization lists both immediate complications and long-term consequences of FGM (www.who.int).

While a number of studies have been conducted on the physiological impact of FGM, the psychological effects have not been widely researched. In addition, such study results appear mixed in the reviewed literature (Kunnskaps-

tön sukuelimistä poistetaan. Naiset eivät välttämättä itse tiedä, minkä kategorian mukaan tai kuinka paljon heitä on leikattu (Obermeyer, 2005). Lisäksi kivusta rimpileva tyttö, silpojan taito tai taitamattomuus, ja teräaseen terävyys, kaikki vaikuttavat silpomisen loppululokseen (Kangoum, 2004). Normaalisti silpominen tapahtuu 40 päivän ikäisenä tai sen jälkeen, aina teini-ikään saakka, heimotavoista riippuen.

Silpomiselle on esitetty lukemattomia syitä ja selityksiä. Puhtaus, neitsyys, aviokelpoisuus, perinne, yhteisön paine, yhteisöllisyys, uskonto ja naisen käyttäytymiseen kohdistuvat odotukset muun muassa lukeutuvat syiden joukkoon (Dahlen, 2011; Hernlund & Shell-Duncan, 2007). Ruotsissa asuvat afrikkalaiset maahanmuuttajat kuvalevat yhteisön painetta seuraavasti,

Jos olet osa yhteisöä, sen myötä koet painetta. Se [silpominen] täytyy tehdä velvollisuudesta, jotta voi olla osa yhteisöä. Vaikka olisitkin tappa vastaan, yhteisön painetta on vaikea vastustaa... Aiheutat kotimaassa häpeää, ellei sinua ole leikattu (Johnsdotter, 2009, s.121; Berggren, 2006, s.55).

Silpomista harjoittavien heimojen yhteisöllisyys on yksi syy, miksi myös tapaa koskeva muutos tapahtuu koko yhteisön käsittävän kouluttamisen ja voimaannuttamisen myötä, kuten on jo alkanut tapahtua Oromo-alueella Etiopiassa (Kassam & Lalise, 2006).

Euroopan ja pohjoisen Amerikan on perinteisesti ajateltu olevan kaukana silpomisperinteestä. Tapa on kuitenkin löytänyt tiensä myös monille puolille Atlantin pohjoista pallonpuoliskoa. Kaksi lääkäriä Michiganin osavaltiossa Yhdysvalloissa joutui oikeuden eteen viime vuonna, sillä he olivat joko itse silponeet tai toimineet avustajina tyttöjen silpomisessa (www.edition.cnn.com).

Euroopan Unionin alueella on arvioitu asuvan satojatuhsia silpomisen kokeneita naisia. Lisäksi tuhannet Euroopassa asuvat tytöt ovat vaarassa joutua silvotuksi (www.ec.europa.eu). Tyttöjen silpominen on rikos Euroopan Unionin alueella.

Kehon ja mielen trauma

Silpomisesta aiheutuvaa kehon traumaa ja lääketieteellisiä seurauksia on tutkittu vu-

senteret, 2010; Berggren et al., 2006). Leading genital cutting researchers Ellen Gruenbaum (2005) and Sara Johnsdotter (2009) call for more research on psychological consequences as well as culturally sensitive and knowledgeable care for women with such experiences and background. Donohoe (2006) described genital mutilation related psychological consequences to include depression, fear, shame, posttraumatic stress disorder and memory problems.

These research participants addressed psychological consequences of FGM from several perspectives. Among other things, they spoke of the pain of powerlessness and feelings of betrayal by a trusted care-giver, and unresolved anger. Almaz, one of the interviewees, expressed her sense of powerlessness while her body was being mutilated.

-They did it against my willingness. It is not a good feeling. I don't know why they do it. It seems like you are helpless, or, they take advantage of you... they just do it, just like an animal. Cutting your body, just like an animal.

Almaz was upset and angry, for a reason. This was one thing she was not sure she could ever forgive her parents for.

Mulu, a blind research participant in her late fifties described a sense of betrayal by her parents, whom she otherwise deeply loved and respected.

-It's really painful. They are cutting you without any pain medication or numbing. That's your body. I remember that. And it's kept quiet. Nobody talks about it. I wouldn't do it to my children. But they did it; my parents did it to me. I am not proud of my parents doing that to me. I did not have a voice then. You don't talk back to your parents. It's not good, but that's all we know when we were growing up. (Dahlen, 2011, p.131-132, emphasis mine).

Almaz and Mulu's comments leave unanswered questions about FGM's impact on trusting care-givers and therefore affecting attachments.

I want to raise one more aspect of this trauma of body and mind, that caught my attention in the research process. The reviewed literature and the research participants spoke of FGM as an important part of preparation for a calm and quiet female. An example statement from literature observes,

sien aikana (Obermeyer, 2005). Ruotsissa ja Englannissa tehdyissä tutkimustyössä niihin osallistuneet maahanmuuttajat (Kangoum, 2004; Morison, 2004) kuvailivat "pitkääkaisia seurauksia virtsaamiseen ja lisääntymiseen liittyen, silpomisen jälkeistä pelkoa siitä, että arpi avautuu uudelleen, virtsatietulehduksia, ja kovia kuukautiskipuja" (Dahlen, 2011). Maailman terveysjärjestö (WHO) on sivuillaan luetellut sekä silpomisen välittömiä komplikaatioita että operaation pidempivaikutteisia seurauksia (www.who.int).

Siinä missä tutkimustyö on keskittynyt silpomisen fyysisiin vaikutuksiin, sen psykologisia seurauksia on tutkittu vähäisesti. Jälkimmäisen tutkimustulokset niin ikään vaikuttavat hakevan yhtenäistä linjaaa asiaa koskevassa kirjallisuudessa. (Kunnskapscenteret, 2010; Berggren, 2006). Muutamat johtavista tutkijoista, Ellen Gruenbaum (2005) ja Sara Johnsdotter (2009), puhuvat tutkimuksen tarpeesta, joka käsittelee psykologisia seurauksia ja kulttuuripohjaista ymmärrystä naisia kohtaan, jotka ovat sen läpi-käyneet. Eräs tutkija kuvaili silpomiseen liittyviin seurausten olevan yhteydessä masennukseen, pelkoon, häpeään, post-traumaattiseen stressioireyhtymään (PTSD) ja muistiin liittyviin ongelmuihin (Donohoe, 2006).

Väitöskirjatutkimukseen osallistujat käsittelevät silpomisen psykologisia seurauksia monesta näkökulmasta. He muun muassa mainitsivat voimattomuuden ja avuttomuuden tunteen, petetyksi tulemisen luotettavan aikuisen taholta, ja käsitelemätön viha. Almaz, kuvaili voimattomuuden tunnettaan, kun hänen kehoaan silvottiin.

-Se tehtiin vasten tahtoani. Ja se tuntui todella pahalta. En tiedä, miksi he tekevät sitä. Vaikuti aivan, kuin omaa avuttomuudentunnnettani olisi käytetty hyväksi... He vain tekevät sen, samalla tavalla kuin eläintä leikkataisiin.

Kehoa leikattiin samalla tavalla kuin eläintä leikkataisiin.

Almaz oli järkyttynyt ja vihainen, ja syystä. Tämä oli yksi asia, jota hän epäröi, josko koskaan voisi antaa vanhemilleen anteeksi.

Sokea, liki kuusikymmenvuotias Mulu, kuvaili omaa petetyksi tulemisen tunnettaan vanhempiensa taholta, vanhempien, joita hän muutoin rakasti ja kunnioitti syvästi.

You want her [daughter] to get rid of her sexual desire, and they think that if you cut away the clitoris, you cut away sexual emotions, and the girl gets calmer (Berggren et al., 2006, p.55).

Mahelt, one research participant, identified FGM as a part of the gender role preparation. Her younger sister experienced genital cutting as a 12-year old, although the tribal age for the practice was usually soon after birth. It had to be, because her sister was not turning out like girls were supposed to.

-They are raising you to be prepared to be a good wife. It is one reason [for FGM], such preparation... that time, my sister, they didn't do it [to her] when she was little. But she breaks stuff and has accidents. If anything she does is an accident, they relate it to because she has not [had] this. Sometimes girls start to grow without [FGM]. And that's how the older grown up girls go through the practice (Dahlen, 2011, p.109-110).

Mahelt's sister broke things and had accidents. She was not a calm and quiet girl. So, for that reason, in Mahelt's understanding, she had to undergo genital mutilation.

Posttraumatic stress disorder (PTSD) has also been reported as an FGM-related consequence. Mahelt further described her teenage sister's posttraumatic stress symptoms after the operation.

-I still remember her screaming. It was very bad. She is scared of pain now. I mean, scared of any kind of procedure. [If] you wanted to cut a nail, I'm sure she would be scared, screaming. If she just feels pain for it, anything, she said, she has a cramp, like I'm dying (Dahlen, 2011, p.132-133).

Decades later, Mahelt's sister is frightened of any sharp object that might touch her skin. She is fearful of the pain of any physiological procedure that involves her body. The question remains, how many more like her there are, who continue to suffer the impact of FGM in silence? The body, indeed, keeps a score.

The question that kept coming to me, was – what, in the end, is the mentioned relationship between FGM and the cultural ideal of a quiet, withdrawn and submissive girl? Is it possible, that the subsequent trauma of body and mind so affects the mutilated girl, that she behaves

-Se [silpominen] on todella tuskallista. He leikkaavat sinua ilman kipulääkitystä tai puudutusta. On kysymys sinun omasta kehostasi. Muistan sen hyvin. Ja sitten täytyi vain olla hiljaa. Kukaan ei puhu siitä. En voisi tehdä sitä omille lapsilleni. Mutta he tekivät sen; omat vanhempani tekivät sen minulle. En ole heistä ylpeä tämän tähden, mitä he tekivät minulle. Mutta ei minulla ollut tuolloin omaa ääntä. Ei omille vanhemmille voi sanoa vastaan. Eihän se ole hyvä asia, mutta se oli ainoa tietämämme tapa toimia omassa lapsuudessani. (Dahlen, 2011, s.131-132).

Almazin ja Mulun kommentteista herää kysymys, kuinka silpominen vaikuttaa luottamukseen ja kiintymyssuhteeseen tytön ja vanhempien välillä.

Kun keskustelemme kehon ja mielen traumasta, haluan nostaa esille vielä yhden asian, joka jää mietittyämään itseäni tutkimustyötä tehessä. Sekä lähdekirjallisuus että haastatellut äidit käsittelevät silpomista myös tyttöä naiseuteen valmistavana tekijänä, sillä operaation seurauksena tytöstä tulisi rauhallinen ja hiljainen nainen. Asiaa kuvataan lähdekirjallisuudessa esimerkiksi seuraavasti.

On tärkeää, että hänen [tyttären] seksuaalinen halu poistetaan. He uskovat, että klitoriksen poistaminen poistaa myös seksuaaliset tunteet, ja näin ollen tytöstä tulee rauhallisempi (Berggren, 2006, s.55).

Väitöskirjahaastatteluissa Mahelt kuvaili silpomista tyttöä valmistavana tekijänä omaan sukupuolioliinsa. Maheltin nuorempi sisar silvottiin 12-vuotiaana, vaikka se heimotapoihin kuuluikin jo pian syntymän jälkeen. Näin tapahtui, koska hänen sisarensa ei käyttäytynyt tytölle sopivalla tavalla.

-Tytöjen kasvatus valmistaa häntä hyväksi vaimoksi. Se on yksi syy [silpomiseen]... Tuolloin sitä ei tehty sisarelleni, kun hän oli pieni. Mutta hän särki astioita, ja hänelle tapahtui vahinkoja. Mikä tahansa vahinko hänelle tapahtuikaan, se katsottiin silpomattomuuden syynä. Joskus tytö jätetään silpomatta pienenä. Mutta tässä on yksi syy siihen, miksi se tehdään myöhemmin (Dahlen, 2011, s.109-110).

Maheltin sisar särki astioita ja hänelle tapahtui vahinkoja. Hän ei ollut hiljainen ja rauhallinen tytö. Maheltin käsityksen mukaan oma sisko



in subdued ways; not primarily because of the cultural expectations but because of the unresolved trauma?

Is it the trauma associated with FGM, that creates the desired disposition of a calm and quiet girl?

A perspective from Christian anthropology

The anthropological considerations surrounding female genital operations are manifold. Even the name used for the practice may reveal a specific cultural perspective. While some speak of genital mutilation, others prefer to call it genital cutting or circumcision.

When we speak of FGM and Christian anthropology, it is essential to begin with the premise and meaning of God creating man and woman in his image. After God finished his creation, he evaluated his work as “very good” (Gen.1:31). His satisfactory evaluation included each physical part of a female body intended for healthy sexual relating and childbearing (Willcox, 2005).

One of the research interview participants, Abeba, reflected on FGM from the perspective of God’s creation, and stated,

-Genital cutting is not good, because it makes the sense [of sexual pleasure] go. Since God created us like that, why do we cut?

In his psalm David describes the care and attention as well as the beauty and value, with which God forms and knits together the human body in the mother’s womb (Ps.139:13-15).

God’s authority as the Creator and His satisfaction with His created work leave us with the question of – what, if any, right do we as the created beings have to cut off body parts when there is no medical reason, necessity or benefit for that?

Abeba’s earlier question was right on target. Why is God’s good and beautiful creation of the female body mutilated? Furthermore, why do Christians continue the practice?

Sandy Willcox, an educator in a Christian University in Addias Ababa, has faced and addressed FGM with her Ethiopian colleagues and doctor-friends. In her classroom, among Christian students and pastors, she encountered varied reactions from silenced sorrow to indifference and even pressure to continue the

silvottiin tuosta syystä.

Post-traumaattista stressioireyhtymää on myös uskottu tapahtuvan silpomisen seurauksena. Mahelt kuvaili teini-ikäisen sisarensa post-traumaattisia oireita pian silpomisen jälkeen.

-Muistan vielä hänen kirkumisensa. Se oli aivan kauheaa. Tänäkin päivänä sisareni pelkää kipua. Tarkoitan, että hän pelkää kaikenlaisia toimenpiteitä. Uskon, että hän alkaisi kirkua pelosta, jos joku yrittäisi leikata hänen kyntensä. Jos hän tuntee minkäänlaista fyysistä kipua syystä tai toisesta, hänelle tulee kramppeja ja hän tuntee kuolevansa (Dahlen, 2011, s.132-133).

Vuosikymmeniä silpomisen jälkeen Maheltin sisar pelkää kaikkea terävää, mikä koskettaa hänen ihoaan. Hän pelkää fyysistä kipua aiheuttavia toimenpiteitä, kaikkea, mikä koskettaa hänen kehoaan. Kuinka moni Maheltin sisaren kaltainen nainen edelleen kärsii hiljaa silpomisen aiheuttamista seurauksista?

Ihmiskeho todellakin pitää kirjaa traumasta.

Kysymys, joka kerta toisensa jälkeen nousi mieleeni, kuuluu – mikä loppujen lopuksi mahtanee olla tuo mainittu suhde silpomisen ja kulttuurin ihannoiman hiljaisen, alamaisen, ja vetätyvän tytön vällillä? Onko mahdollista, että silpomisen myötä kehoa ja mielen maailmaa kohdannut trauma niin vaikuttaa tytön elämässä, että hän käyttää hillityn alamaisesti; ei ensisijaisesti kulttuuri-ihanteen tähden, vaan käsittelemättömän trauman seurauksena? Muovaako viime käessä silpomisesta johtuva, käsittelemätön trauma tytöstä hiljaisen ja rauhallisen, kulttuurin ihannoiman naisen?

Näkökulma Kristillisestä antropologiasta

Naisten silpomista koskeva antropologinen keskustelu on monenkirjava. Jopa sana, jolla tappa kuvataan, saattaa kertoa jotain kulttuuriin pohjautuvasta näkökulmasta. Yksi puhuu silpomisesta, toinen leikkauksesta tai operaatiosta ja kolmas naisten ympärileikkauksesta.

Kun lähestymme silpomista Kristillisestä antropologian näkökulmasta, meidän on tärkeää ankkuroida keskustelumme luomistyöhön; siinä, että Jumala loi miehen ja naisen omaksi kuvakseen. Tehty luomistyö oli Jumalan oman arvion mukaan sangen hyvä (1.Moos.1:31). Tuo tyytyväinen arvio sisälsi naisen kehon kokonaisuudessaan. Kaikki, mitä tarvitaan seksuaali-

practice. She remarks,

The mutilation of woman's sexual organs is an abuse of what God intended for women, their husbands, and the process of conceiving and bearing children. How is it that such a wonderful and good creation could reach a stage where women and small girls are cut in a way that is incredibly cruel and harmful to their bodies as well as to the pleasure that God designed for men and women within marriage? We must ask, "What went wrong?" (Willcox, p.38)

From the perspective of Christian anthropology, we might answer with one simple word: The Fall. God's beautiful creation was marred throughout as a result of sin. Male and female bodies suffer the consequences, not only through hard toil and birth pains, but because of shame, fear and multiple forms of physical and emotional abuse.

Yet, even after paradise was lost, men and women continued to bear the image of God (Gen.9:6). Therefore, each life, and each human body must be valued and respected as planned and preciously formed by the Creator.

Cultural practices are a natural phenomenon in a diverse world. Any practice must be understood in its particular context and meaning. Having said that, when a cultural practice specifically harms, damages or traumatizes a human being, and so violates God's created purpose, we must pause and pay careful attention. We must provide an atmosphere of safety where controversial issues such as FGM can be addressed. And we must learn to listen to the untold stories of trauma, fear and anger related to the practice.

Therapeutic considerations

Mahelt described her sister's fear of any sharp object touching her body. Such objects served as triggers to remind the sister of her FGM-related trauma from decades ago. When dealing with trauma, it is important to recognize the role of triggers. A certified trauma specialist and licensed therapist Norman Wright describes the role of triggers.

The brain is like a video camera: it tapes and stores not only what it sees but also what it feels. A trigger recalls the events and feelings. It may be an anniversary or something they have seen on TV. Triggers make people fear losing control

suuteen ja synnyttämiseen, oli sangen hyvää (Willcox, 2005).

Abeba pohti silpomista Jumalan luomistyon näkökulmasta.

-Silpominen ei ole hyvä asia, koska sen myötä seksuaalinen mielihyvän tunne poistetaan. Koska Jumala loi naisen juuri sellaiseksi, miksi osia leikataan pois?

Daavid kuvaillee Jumalan luomaa ihmistä, tuon luomistyon kauneutta ja arvoa, huolenpitoa ja kaiken huomioimista. Jumala kutoi ihmiskehon kokoon ylen ihmeellisesti jo äidin kohdussa (Ps.139:13-15).

Sekä Jumalan auktoriteetti Luojana että hänen oma arvionsa luomistyon täydellisyystä juri sellaisena haastaa meitä kysymään – mikä oikeus luodulla on leikata Jumalan luoman ihmiskehon osia silloin, kun tuolle operaatiolle ei ole lääketieteellistä syytä ja välttämätöntä tarvetta?

Abeban aiempi kysymys osuu naulankantaan. Miksi naisen kehoa, Jumalan hyvän ja kauniina luomistönä, silvotaan? Entä miksi Kristityt jatkavat silpomisperinteent harjoittamista?

Addis Abeban Kristillisessä yliopistossa opettaja toimiva Sandy Willcox on kohdannut silpomista. Lääkäriystäviensä ja kollegojensa kanssa hän on myös herättänyt aiheesta keskustelua. Luokkahuoneessa tapahtuvassa keskustelussa hän on kohdannut erilaisia mielipiteitä asian puitteissa. Kristittyjen opiskelijoiden ja myös pastoreiden reaktiot ovat vaihdelleet hiljaisesta surulliseen ja välinpitämättömyydestä silpomistavan puolustamiseen. Willcox kuvilee asiaa seuraavalla tavalla.

Naisen sukupuolielinten silpominen on Jumalan luomistyon solvaamista sen suhteen, mitä Jumala tarkoitti naisille, heidän aviomiehilleen, avioelämälle ja perheen perustamiselle. Miten on mahdollista, että Jumalan ihmeellinen luomistyo silvotaan pienten tyttöjen kehossa niin julmalla tavalla, ja siten sekä vahingoitetaan heidän kehoaan että turmellaan se hyvä, mitä Jumala tarkoitti avioelämään? Meidän tulee kysyä itseltämme, "Mikä meni vikaan?" (Willcox, s.38)

Kristillisen antropologian näkökulmasta me tiedämme, mikä meni vikaan. Voimme kiteyttää vastauksen yhteen sanaan: syntiinlankeamus. Ihmisen tottelemattomuus turmeli Ju-

and going insane (Wright, 2003, p.226).

Triggers and how they manifest in the body and the mind must be identified in therapy. The client can be guided to recognize bodily sensations such as sweaty hands, tightness in the throat or ‘butterflies’ in the stomach. Physical exercise and activity are helpful as the client connects with and listens to their own body.

On the face of multiple triggers and bodily sensations, the client then needs to learn to live in the present and recognize that they are now safe. Even while the past is talked about in therapy, it is important for the client to remain grounded. “Grounded” means that you can feel your butt in your chair, see the light coming through the window, feel the tension in your calves, and hear the wind stirring the tree outside. Being anchored in the present while revisiting the trauma opens the possibility of deeply knowing that the terrible events belong to the past (Van der Kolk, 2015, p.70).

In addition to identifying triggers and learning to be grounded, trauma experts and researchers also highlight the importance of putting traumatic experiences to words. Healing begins by being able to express what happened. Symbolically, genital cutting leaves the soul mutilated as well (Dahlen, 2017). Often the girl is expected to bear the moments of her FGM-related horror alone as it is not acceptable in many cultures to speak of what happened and what it was like. Several research participants spoke of the secret surrounding FGM. Almaz summarized the impact of secrecy, stating,

-The sad part is, if you hear news, you pretend like nothing happened. Or try to, in the back of your mind. Even now, with Ethiopian friends... I don't think I would be open to talk and say what happened. It happens. But it's like a secret thing in your life. This is the first time I talk about [it] myself... Every time this subject comes up, you hear from the news, it clicks because it happened to you... It's so hard to talk about this. You don't talk about these things [even] to your sisters. We are sisters, one year apart, [but] I can't say “do you remember, when we had this?” They will say, “what is wrong with you?” (Dahlen, 2011, p.136).

It is not that Almaz did not want to talk. She was afraid of being judged. Almaz said how,

malan ihmeellisen luomistyön. Myös miehen ja naisen kehot kärsivät syntiinlankeemuksen seuraukset, eikä vain kovan työn ja synnytystuskien myötä, vaan häpeä, pelon ja moninaisen henkisen ja fyysisen hyväksikäytön tähden. Paratiisin menetyksen jälkeen, joskin tärveltyvä, ihminen on edelleen Jumalan kuvaksi luotu (1.Moos.9:6). Sen tähden jokainen elämä ja jokainen ihmiskeho on mittaamattoman arvokas. Ihmiskehoa ja -elämää tulee kunnioittaa Luojan alkuperäisen tarkoituksen mukaisesti.

Monivivahtiset kulttuuritavat ovat luonnollisesti osa maailmaamme. Jokaisen kulttuuritavan merkitys tulee ymmärtää omassa kontekstissaan. Meidän kuitenkin tulee pysähtyä pohtimaan kulttuuritapojen vaikutusta silloin, kun ne erityisesti aiheuttavat vahinkoa ja traumaa ihmiselle, ja siten toimivat Jumalan alkuperäisen tarkoitukseen vastaisesti. Mielipiteitä jakavassa ja tunteita nostattavassa silpomiskeskustelussa on tärkeää, että asiasta voidaan puhua turvallisessa ilmapiirissä. Meidän tulee myös oppia kuuntelemaan tavan seurauksesta syntynytä hiljaisuudessa kannettua pelkoa ja vihaa.

Terapeuttisen työskentelyn lähtökohtia

Mahelt kuvaili sisarensa pelktiloja silloin, kun jokin terävä kosketti hänen kehoaan. Terävät esineet laukaisivat hänessä silpomisesta juontuvan traumamuiston vuosikymmenien takaa. Traumatyöskentelyssä on oleellista huomioida tämänkaltaisten traumamuistoja laukaisevien tekijöiden rooli. Trauma-asiantuntija ja terapeutti Norman Wright kuvaillee laukaisevia tekijöitä seuraavasti.

Ihmisen aivot toimivat videokameran tavoin: ne kuvaavat ja varastoivat sekä sitä, mitä ihminen näkee, että sitä, mitä hän kokee ja tuntee. Traumamuiston laukaisija tuo mieleen tilanteen ja siihen liittyvät tunteet. Laukaisevana tekijänä voi toimia vaikkapa vuosipäivä tai jokin tilanne, minkä henkilö on nähty televisiossa. Näissä tilanteissa ihminen pelkää, että menettää kontrollin tai jopa järkensä (Wright, 2003, s.226). Terapiassa on oleellista hahmottaa traumamuistoja laukaisevia tekijöitä ja sitä, kuinka ne vaikuttavat ihmiskehoon ja mieleen. Asiakasta tulee ohjata tiedostamaan kehon aistimuksia, esimerkiksi käsienväistä, kurkussa tapah-



-It's easy to talk with you, because you don't judge me because of that.

Almaz did not know how much I wanted to judge her parents, grandparents and culture. I felt like a traitor for not condemning FGM during the interviews. But my hands were tied, since I was conducting a research interview. Instead, I had to learn to listen to and enter into their world and complex cultural experiences. In hindsight, that was a blessing in disguise. These women felt safe to talk about their childhood trauma and wounds in part because I would not react, question or judge.

The taboo-nature of the practice as well as the fear and shame surrounding FGM leave many to suffer their traumatic experiences in silence. Diane Langberg who, for several decades, has worked with adult survivors of childhood sexual trauma and abuse, speaks of the priority of establishing a sense of safety.

The central experiences of childhood trauma are silence, isolation, and helplessness. Healing, then, must involve a restoration of voice, safe connection, and rightful power... Abuse that was sadistic or violent in nature is more harmful (Langberg, 2003, p.79, 85).

For any healing of trauma take place, the experience must be put to words. It must be listened to with grace, respect and understanding. Most of those who have undergone FGM and live with its consequences, remain silent for fear of judgment. We must learn to listen with compassion in order to understand the phenomenological experience of these women.

However, while voicing the traumatic experience in safe context is the first priority, Bessel Van der Kolk takes the matter a step further, stating,

We have discovered that helping victims of trauma find the words to describe what has happened to them is profoundly meaningful, but usually not enough. The act of telling the story doesn't necessarily alter the automatic physical and hormonal responses of bodies that remain hypervigilant, prepared to be assaulted or violated any time. For real change to take place, the body needs to learn that the danger has passed and to live in the reality of the present. Our search to understand trauma has led us to think differently not only about the structure of the

tuvaan kireyttää tai perhosia vatsassa. Liikunta ja muu fyysinen toiminta auttavat asiakasta tulemaan kehonsa kanssa kosketuksiin ja kuuntelemaan, mitä kehossa tapahtuu.

Laukaisevien tekijöiden ja kehon moninaisten reaktioiden tähden asiakkaan on tärkeää oppia elämään tässä hetkessä ja tiedostamaan, että hän on nyt turvassa. Myös terapiassa menneen tapahtumia ja traumoja käsitellessä on ensisijaisen tärkeää, että asiakas kokee olevansa "maadoitettu" (grounded), ankkuroitu tähän hetkeen.

"Grounded" (Maadoitettu, ankkuroitu), tarkoittaa sitä, että ihminen tuntee oman takapuolensa tuolilla, näkee valon heijastuvan ikkunasta, kokee kireyttää lihaksissaan, ja kuulee ulkona puhaltavan tuulen viiman. Se, että menneisyyden traumaa käsitellessä ihminen pysyy ankkuroituna tässä hetkessä, avaa uusia ulottuvuuksia tietoisuudelle siitä, että järkyttävät tapahtumat todellakin kuuluvat menneisyyteen (Van der Kolk, 2015, s.70).

Edellisen lisäksi trauma-asiantuntijat ja -tutkijat korostavat sitä, kuinka välttämätöntä on traumakokemusten sanoiksi pukeminen. Parantuminen alkaa sillä, että sanoitamme, mitä tapahtui. Silvotun tytön sielu jää usein kokemuksen myötä silvotuksi (Dahlen, 2017). Kantaahan tytö tapahtuman kauhun yksin sisimmässään, koska monissa kulttuureissa silpomiskokemuksesta ei ole lupa puhua. Haastatellut äidit puhuivat silpomista ympäröivästä salaisuudesta. Almaz kuvasi omaa kokemustaan.

-On todella surullista, että silloinkin, kun asiasta kuulee uutisia, itse täytyy olla aivan kuin mitään ei olisi tapahtunut. Tai niin yritän olla mielen maailmassa. En voi puhua tapahtuneesta avoimesti edes etiopialaisten ystävien kanssa. Silpomista tapahtuu. Ja sitten siitä tulee oman elämän suuri salaisuus. Tämä on ensimmäinen kerta, kun otan asian puheeksi. Kuitenkin joka kerta, kun siitä puhutaan vaikkapa uutisissa, muistan, että se tapahtui minulle.... Minun on niin vaikea puhua siitä asiasta, en voi puhua edes sisarteni kanssa. Olemme syntyneet vuoden välein, mutta en voi sanoa heille, "muistatko sen, kun meidät silvottiin?" Jos sen tekin, he sanoisivat minulle, "mikä sinua oikein vaivaa?" (Dahlen, 2011, s.136).

Ei niin, etteikö Almaz olisi halunnut puhua jo



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mind but also about the processes by which it heals (Van der Kolk, 2015, p.21).

While the body keeps the score of the trauma experiences, the body and the mind can heal as the client and the therapist together face and work with the sensations and reactions that are experienced by the body. The body and mind can heal as the traumatized person learns to be anchored in the present, even with the reality of triggers. And the body and mind can heal through the use of creative expression for words, relaxation techniques and exercise, thus holistically attending to the body and mind.

After the three rounds of research interviews (Seidman, 2006, three-interview structure) were over, Telile was surprised by the impact of voicing her childhood memories. Now that her FGM secret no longer kept her in bondage, she wanted to do something to help her country-women, who were still bearing their traumatic memories in silence. While she did not know in practice what such helping might look like, her heart was ready to reach out.

Mahelt also described the therapeutic effect of simply having been able to talk about the trauma that she had experienced personally and vicariously.

-It really helped me to evaluate my life. Where I was and where I am, mentally inside. It's good. It's kind of therapy, really. It's very helpful for me. And it was all truth, what I shared with you. Healing the FGM-related bodily trauma and heart-wounds takes courage, time and companionship. It requires creating dialogue through safety and trust. And it demands silencing the inner voice of judgment for the purpose of compassion. As horrified and angry as I was, learning to listen and be present enabled me to invite others to voice their painful secrets.

As Christ the Healer looks through our eyes, speaks through our words and encounters others through our presence, the trauma of body and mind can be healed.

One heart at a time.

References

- Berggren, Vanja; Bergström, Staffan & Edberg, Anna-Karin (2006). Being different and vulnerable: Experiences of immigrant African women who have been circumcised and sought maternity care in

aiemmin. Hän oli peloissaan, että hänet tuomittaisiin.

-Sinulle on helppo puhua, koska et tuomitse minua silpomisen takia.

Almaz ei tiennyt, kuinka syvästi omassa sisäisessä maailmassani halusin tuomita hänen vanhempana, isovanhempansa ja koko kulttuurin. Tunsin itseni petturiksi, koska en haastattelujen aikana millään tavoin tuominut silpomista. Käteni olivat sidotut, sillä haastattelut olivat osa väitöskirjatutkimustyötä. Oman reagoinnin sijaan minun täytyi opetella kuuntelemaan ja astumaan heidän maailmansa monimutkaisiin kulttuurikokemuksiin. Jälkeenpäin katsoen, tuo todellisuus muodostui siunaukseksi. Maahanmuuttajaäidit rohkaistivat puhumaan lapsuuden traumoistaan ja haavoistaan osittain sen tähden, ettei minulla ollut lupaa reagoida, kyseenalaistaa tai tuomita.

Silpomista ympäröivä tabu, yhdessä pelon ja häpeän kanssa vaikuttavat sen, että monet naiset kantavat traumakokemuksensa ja kärsimyksensä kaikessa hiljaisuudessa. Vuosia seksuaalisen trauman ja hyväksikäytön saralla työskennellyt Diane Langberg puhuu siitä, kuinka ensisijaisen tärkeää on luoda turvallinen ilmapiiri.

Hiljaisuus, eristäytyminen ja avuttomuus ovat keskeisiä kokemuksia lapsuuden traumoissa. Parantuminen alkaa siitä, että menetetty oma ääni saa palautua, turvallinen yhteys syntyy, ja asiakas saa kokea asiaan kuuluvaltaa voimaantumista... Sadistinen tai muutoin väkivaltainen trauma ja hyväksikäyttö on kaikkein vahingoittavinta (Langberg, 2003, s.79, 85).

Trauman parantuminen alkaa tapahtuneen sanoittamisesta. Kuuntelijan täytyy osata olla läsnä armollisesti, kunnioittavasti ja ymmärtäväväisesti. Useimmat silvotut naiset elävät leikkauksesta aiheutuvien seurausten varjossa yksin, sillä toisen tuomitseva asenne pelottaa. Meidän tulee oppia kuuntelemaan avoimella ja laupialla sydämellä, jotta näiden tyttöjen ja naisten omakohtainen kokemus tulisi ymmärrettyksi.

Niin oleellista kuin traumaattisen kokemus sanoittaminen turvallisessa ympäristössä onkin, traumatutkija Bessel Van der Kolk vie lukijaa vielä syvemmälle traumatyöskentelyn maailmaan.

Olemme todenneet, että trauman kokeneiden auttaminen tapahtuman kuvaamiseen on mer-

- Sweden. Journal of Transcultural Nursing, 17 (1), 50-57.
- Dahlen, Ulla (2011). Female Genital Cutting: Phenomenological Interviews on the Ethiopian Immigrant Mothers' Experience. Regent University, VA. ProQuest Dissertations & Theses: UMI 3475774.
- Dahlen, Ulla (2017). Silvottu sielu: Maailma maahanmuuttajaäidin silmin (A mutilated soul: The world through the eyes of an immigrant mother). Aikamedia.
- Donohoe, Martin (2006). Female genital cutting: Epidemiology, consequences and female empowerment as a means of cultural change. Medscape Ob/Gyn & Women's Health, 11 (2), 1-6.
- Gruenbaum, Ellen (2005). Socio-cultural dynamics of female genital cutting: Research findings, gaps and directions. Culture, Health & Sexuality, 7 (5), 429-441.
- Hernlund, Ylva & Shell-Duncan, Bettina (2007). (Eds.) Transcultural bodies: Female genital cutting in global context. Piscataway, NJ: Rutgers University Press.
- Johnsdotter, Sara; Moussa, Kontie; Carlbom, Aje; Aregai, Rishan & Essen, Birgitta (2009). "Never my daughters": A qualitative study regarding attitude change toward female genital cutting among Ethiopian and Eritrean families in Sweden. Health Care for Women International, 30, 114-133.
- Kangoum, Abdul-Almawla; Flodin, Ulf; Hammar, Mats & Sydsjo, Gunilla (2004). Prevalence of female genital mutilation among African women resident in the Swedish county of Östergötland. Act Obstetricia Et Gynecologica Scandinavica, 83 (2), 187-190.
- Kassam, A. & Lalise, A. Diro (2006). Community-based approaches to reforming female genital operations in Africa: A case study from the Oromia regional state of Ethiopia. Anthropology in Action, 13 (3), 22-39.
- Kunnskapssenteret (2010). Psychological, social and sexual consequences of female genital mutilation/cutting (FGM/C): A systematic review of quantitative studies. Norwegian Knowledge Center for the Health Services, 13. Oslo, Norway.
- Langberg, Diane M. (2003). Counseling survivors of sexual abuse. Xulon Press.
- Morison, Linda A.; Didir, Ahmed; Elmi, Sada; Warsame, Jama & Didir, Shamis (2004). How experiences and attitudes relating to female circumcision vary according to age on arrival in Britain: A study among young Somalis in London. Ethnicity & Health, 9 (1), 75-100.
- Obermeyer, Carla Makhlof (2005). The consequences of female circumcision for health and sexuality: An update on the evidence. Culture, Health & Sexuality, 7 (5), 443-461.
- Seidman, Irving (2006). Interviewing as qualitative research: A guide for researchers in education and the social sciences (3rd ed.). New York, NY: Teachers college press.

kittäävää, mutta ei yleensä riittää. Se, että kerromme traumatarinamme, ei välitämättä muuta kehon automaattisia fyysisiä ja hormonaalisia reaktioita, vaan keho edelleen jatkaa ylivalppauden tilassa, valmiina seuraavaan loukkauseen hetkenä minä hyvänsä. Jotta todellinen muutos voi tapahtua, kehon täytyy oppia ymmärtämään se, että traumatilanne on mennyt ohi, ja elämää voi elää tämän hetken todellisuudessa. Tutkimustyö trauman ymmärtämiseksi on ohjannut meitä katsomaan traumaa, ei vain mielen rakenteen näkökulmasta, vaan myös niiden prosessien myötä, joiden vaikutuksesta se paranee (Van der Kolk, 2015, s.21).

Vaikka keho pitääkin kirjaan traumakokemuksesta, sekä keho että mieli voivat parantua, kun asiakas ja terapeutti yhdessä työskentelevät kehon kokemien tunteiden ja reaktioiden kanssa. Keho ja mieli voivat parantua, kun traumaattisen kokemuksen läpikäynyt henkilö oppii ankkuroitumaan nykyhetkeen traumamuistoja laukaisevista tekijöistä huolimatta. Ja keho ja mieli voivat parantua luovien trauman sanoittamisen menetelmien, rentoutumisharjoitusten, ja liikunnan – kokonaisvaltaisen kehon ja mielen kohtaamisen, ja siten työskentelyn myötä.

Kun kolme eri haastattelukertaa (Seidman, 2006, three-interview structure/ kolmen syvähaastattelukerran rakenne) olivat ohitse, Telile oli yllättynyt siitä, kuinka lapsuuden muistojen sanoittaminen oli vaikuttanut häneen. Nyt kun silpomista ympäröivä salaisuus ei enää kahlehtinut häntä, Telile mietti, mitä voisi tehdä omien maanraigistensa hyväksi, jotka edelleen kantoivat traumamuistojaan kaikessa hiljaisudessa. Hän oli valmis auttamaan toisia, vaikka ei vielä tässä vaiheessa tiennyt, miltä se voisi näyttää.

Myös Mahelt kuvaili haastattelujen terapeutista merkitystä, sillä se oli auttanut häntä puhumaan omista ja sisarensa traumakokemuksista. -Puhuminen todella auttoi minua miettimään elämääni. Mistä olen tulossa ja missä olen tänään henkisesti, sisäisen maailman näkökulmasta. Tämä oli tärkeää asia, ja mielestääni eräänlaista terapiaa. Se auttoi minua. Mitä kerroin sinulle, on kaikki totta.

Silpomisesta aiheutuvan kehon trauman ja si-

Van der Kolk, Bessel (2015). *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma*. New York, NY: Penguin Books.

Willcox, Sandy (2005). *Cut Flowers: Female Genital Mutilation and a Biblical Response*. Addis Ababa, Ethiopia: SIM Publishing.

Wright, H. Norman (2003). Crisis and trauma counseling. Ventura, CA: Regal Books.

<https://edition.cnn.com/2018/11/20/us/female-genital-mutilation-case-charges-dropped/index.html>

European Commission (www.ec.europa.eu)

World Health Organization (www.who.int)

säisen maailman haavojen kohtaaminen kysyy rohkeutta, aikaa ja sydämen yhteyttä toisen kanssa. Parantumiseen tarvitaan luottamuksellista dialogia turvallisessa ympäristössä. Kuuntelijan on vaiennettava oma tuomitseva asenne, jotta toisen kokemusta voi kuunnella laupiaasti. Niin kauhistunut ja vihainen kuin olinkaan, se, että opettelin olemaan läsnä ja kuuntelemaan, mahdollisti toisen sanoittamaan omia kipeitä salaisuksiaan.

Kun Kristus parantajana katsoo minun silmieni kautta, puhuu sanojeni kautta ja kohtaa olemukseni myötä, kehon ja mielen trauma voivat parantua.

Yksi sydän kerrallaan.

Comment to “The trauma of body and mind in female genital mutilation/ cutting (FGM/C): Christian anthropological and therapeutic perspectives“

by Thanh Tu Nguyen (Vietnam)

First of all, the author wonderfully combined the interdisciplinary methods to approach such a cultural, historical and religious issue: “female genital mutilation/cutting”! Secondly, the excellent part of the writing is raise the painful hidden voice where some women have been going through. Thirdly, the narrative finds its meaning in its original Reference where such practice is not in the mind of the Creator (Gn 1:26). Well done!

The questions remains on the level of social awareness and the readiness of those women who need to be empowered and then choose to speak up. Finally, the APA norms for quoting and a section on definition of the terminology should be taken into consideration.



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former article: <https://em-capp.ignis.de/7/#/122>

Comment to “The trauma of body and mind in female genital mutilation/ cutting (FGM/C): Christian anthropological and therapeutic perspectives“

by Olga Krasnikova (Russia)

Beginning to read the article by Ulla Dallen, I could not even imagine what emotional challenge it would turn for me. But I am grateful to Ulla for her courage to explore and draw public attention to such a complicated and painful item as FGM. I was aware of the problem before, but have never realized its full scope and consequences. Considering the research conducted by Ulla Dallen, I thought that our unwillingness to immerse into traumatic experiences connected with violence, our refusal to openly discuss some taboo items, as well as ignoring the feelings associated with the terrible experience, brings us to some kind of tacit consent that all this is common thing to happen and can go on further.

While giving publicity to this problem, we attain the chance to question the „normativity“ of the violence committed against small and teenage girls, to dispel the myth that by mutilating the body and soul, it is possible to make someone better. All that is causing irreversible harm to a woman’s physical and mental health is unlikely to help her become a calm, quiet and good wife.

From the Christian point of view, violence against a person, causing harm with irreparable consequences for the body and soul, for the sake of „convenience“ for other people or in the interests of tradition is unacceptable. And the tradition of FGM is preserved not for spiritual purposes, but due to family stereotypes: the

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Former articles:

<https://emcapp.ignis.de/3/#/122>
<https://emcapp.ignis.de/3/#/136>
<https://emcapp.ignis.de/4/#/130>
<https://emcapp.ignis.de/6/#/150>
<https://emcapp.ignis.de/10/#p=36>

husband’s and family comfort, dominating in marital relations and opportunity to manipulate a woman. This tradition is somewhat similar to castration not for the Kingdom of heaven, but for the sake of profit, which is considered to be a sin according to the Gospel (Matt. 19:12).

In contrast to actions condemned by the society – such as sexual or child abuse, FGM, which is essentially the same abuse, is considered by many as a simple custom, a tradition caring for family values (peace and calmness at home). The article pays special attention to the power of social cultural and family attitudes that make impossible to resist violence. Therefore, it is so important to conduct further research on the

effects of FGM and publish works like Ulla Dallen. When violence loses the mask of „care“ (for health, well-being, etc.) and is recognized to be a crime against a person, the victim attains the legal right to express anger, which otherwise should be suppressed (it's a shame to be angry for care!). It grieves me to think how much „legal“ (permitted and even approved) violence still exists in the world, which could have been easily avoided if not for the power of habit, tradition, rules.

When reading the article, I suddenly felt hard to breathe, everything shrinking inside – the familiar symptoms for me - this way the medical trauma of my own childhood resonated.

When I was 6 years old, I underwent adenoidectomy. As it turned out, there was no special need to do it – just for the sake of prevention. The operation was performed in a children's hospital in Moscow. According to the rules of the time (1970-ies) the operation was made without anesthesia (even local), a child was tied with belts to the chair, his teeth unclenched and adenoids were cut out. The small patient usually spent in the hospital three days, parents were not allowed. If the child was screaming and crying, he was ashamed and punished by the medical staff, so I was trying with all my infant strength to endure and not to show my pain and feelings. In my opinion, this procedure is similar to cruel torture, but it was approved by the Ministry of health and was considered an ordinary simple operation („It's alright, not a big deal!“ - as was explained to my parents). I still can't understand why it was necessary to expose children (and me) to such a violence. But I'm not sure that even nowadays some old experienced doctor in some children's hospital does not operate adenoids that way, like in the „good old days“. Being an adult, I've spent a lot of time, effort and money for body-oriented psychotherapy of this trauma, but I could not fully cope with the psycho-physiological consequences. And I have never met any information about the irreparable harm to children caused by such „medical care“ and no discussing-condemning of such methods of treatment. But I agree with Ulla Dallen, we must talk about such

things! And like all victims of violence, I also need the opportunity not to make a „painful secret“ of my traumatic experience.

Surely, starting to call a spade a spade, we may face a problem - when denouncing evil, not to fall into the condemnation of people who have committed it. Ulla writes about this problem and how difficult it was to cope with her own feelings of horror and anger, while maintaining a position of compassion and mercy towards women who survived FGM. Christian spiritually-oriented approach can help to keep from hardening our hearts and condemning people – as we are not judges for them. I absolutely agree with Ulla that trauma therapy requires extreme caution, care, tact and high professionalism, as well as true Christian humility and at the same time great courage to resist anti-human customs and rules. Keeping it in mind, with our diligence and God's help, there will be a little less violence and a little more love in our world.

Miguel Ángel Alcarria (Spain)

Our body code.

Deciphering the meaning of body and somatomorphic manifestations from an integrative perspective

Miguel Ángel Alcarria
Psychologist, Life Coach, International speaker, Theologian, President of the group of evangelical psychologists in Spain (GPE), Lead Pastor at Cornerstone Christian Community of Barcelona.



Miguel Ángel Alcarria (Spain)

Nuestro código corporal: descifrando el significado de las manifestaciones corporales y somáticas desde una perspectiva integradora

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Christianity gives great value to the human body. The reason for this great value lies in the fact that the body, biblically, has a close link with the image of God, this being the place where the Holy Spirit dwells in the believer; cause why the Holy Scriptures urge the Christian to safeguard him from the contamination of sin and guilt (see Gen. 1:26; 1 Thess 5:23; 1 Cor 6:15; 1 Cor 6:19).

This link established between the spiritual and the physical, equivalent to the relationship that was subsequently established by important personalities like Jean-Martin Charcot and Sigmund Freud between the psyche and corporal manifestations; it was ignored in the middle of the era of behavioral empiricism.

It has taken several decades for psychology, after having gone from Freudism to Cognitivism, passing through Behaviorism, to arrive at this time to the position to assess what is the role played by other aspects of human experience such as faith or bodily manifestations. In this sense, the science of our century is accepting the great complexity involved in the study of

El cristianismo otorga un gran valor al cuerpo humano. La razón de ser de este gran valor radica en que el cuerpo, bíblicamente, guarda un estrecho vínculo con la imagen de Dios, siendo éste el lugar en el que habita el Espíritu Santo en el creyente; causa por la que las Sagradas Escrituras instan al cristiano a salvaguardarlo de la contaminación del pecado y la culpa (ver Gn. 1:26; 1 Ts. 5:23; 1Co. 6:15; 1 Co. 6:19).

Este vínculo establecido entre lo espiritual y el cuerpo físico, equivalente a la relación que posteriormente establecieron personajes tan relevantes como Jean-Martín Charcot y Sigmund Freud entre la psyché y las manifestaciones corporales; fue obviado en plena era del empirismo conductista.

Han tenido que pasar varias décadas para que la psicología, tras haber transitado desde el freudismo hasta el cognitivismo, pasando por el conductismo, en estos momentos se encuentre en la tesitura de evaluar cuál es el papel que desempeñan otros aspectos de la experiencia humana tales como la fe o las manifestaciones corporales. En este sentido, la ciencia de nue-

the human being, and it is beginning to observe it from a more integrating and holistic point of view.

Both in medicine and in psychology, empirical study has segmented knowledge in such a way that it has underestimated the continuous relationship that exists between the different disciplines related to human study. In this sense, we can positively assess the progress of research such as that of Yanartas et al. (2019), in which the central role played by somatic complaints in relation to depression is highlighted, and that of Jorna et al. (2006) in which the benefits of physical activity in the promotion of mental and spiritual health are highlighted.

Our body, starting with our facial expression and our body posture, expresses both our well-being and our emotional discomfort; so it is not difficult to think that a change in our body expression may have the ability to influence our mental state. It is in this sense that the investigations related to the so-called facial feedback are also expressed; which find a close and bidirectional relationship between our emotions and the corporal manifestation of them. These investigations repeatedly find that facial expressions not only express emotions but also have the ability to modulate and even initiate an emotional experience (McIntosh, 1996).

Abundant in this mind-body relationship, there are still great unknowns such as somatoform disorders or the somatic expression of emotional traumas. On one hand, in relation to somatoform disorders, some researchers have suggested that many of these are based on states of anxiety and depression (Kohlmann et al., 2016); stating that faith could contribute to the well-being of people with this type of pathology. On the other hand, scientific research is beginning to talk about the existence of emotional traumas that, being rooted in the unconscious, would have the ability to express themselves physiologically using activation patterns based on body memory (Kennedy & McKenzie, 2019). These patterns of activation could manifest emotions, sometimes difficult to express verbally such as fear, shame or the feeling of abandonment. Studies such as those mentioned above have allowed us to get closer to what many refer to

stro siglo está aceptando la gran complejidad que conlleva el estudio del ser humano y lo está empezando a observar desde un punto de vista más integrador y holístico.

Tanto en la medicina como en la psicología, el estudio empírico ha segmentado de tal manera el conocimiento que ha menospreciado la relación continua que existe entre las diferentes disciplinas relacionadas con el estudio humano. En este sentido es que podemos valorar positivamente el avance que suponen investigaciones como la de Yanartas et al. (2019), en la que se destaca el papel central que desempeñan las quejas somáticas en relación con la depresión, y la de Jorna et al. (2006) en la que se ponen de relieve los beneficios que aporta la actividad física en la promoción de la salud mental y espiritual. Nuestro cuerpo, empezando por nuestra expresión facial y nuestra postura corporal, expresa tanto nuestro bienestar como nuestro malestar emocional; por lo que no es difícil pensar que un cambio en nuestra expresión corporal pueda tener la capacidad de influir en nuestro estado mental. Es en este sentido que se expresan también las investigaciones relacionados con la denominada retroalimentación facial; las cuales encuentran una relación estrecha y bidireccional entre nuestras emociones y la manifestación corporal de las mismas. Dichas investigaciones encuentran repetidamente que las expresiones faciales no sólo expresan emociones sino que tienen la capacidad de modular e incluso iniciar una experiencia emocional (McIntosh, 1996).

Abundando en esta relación mente-cuerpo, todavía existen grandes incógnitas tales como los trastornos somatomorfos o la expresión somática de traumas emocionales. En relación a los trastornos somatomorfos, algunos investigadores han sugerido que muchos de éstos se basan en estados de ansiedad y depresión (Kohlmann et al., 2016); manifestando que la fe podría contribuir al bienestar de las personas con este tipo de patologías. Por otra parte, la investigación científica está empezando a hablar acerca de la existencia de traumas emocionales que, estando arraigados en el inconsciente, tendrían la capacidad de expresarse fisiológicamente empleando patrones de activación basados en la memoria corporal (Kennedy & McKenzie, 2019). Di-

as fourth-generation psychotherapeutic techniques, such as neurolinguistic programming, EMDR, focusing or EFT techniques of emotional liberation. These techniques are given the ability to produce emotional changes in an effective and fast way, acting directly on the mind-body relationship by changing the meaning of the emotional memories that have been blocked in our nervous system. The relationship between our thoughts and emotions is well known; however, as we have seen, the bi-directional relationship between our emotions and our bodily reactions is scarcely being rediscovered with truly promising results. This type of fourth-generation therapies has inveterate critics but also very enthusiastic advocates; and although research should be the one that ratifies and consolidates its effectiveness, it opens the way to discover what we can call our body code. Deciphering the code of our body in its entirety could have not only therapeutic applications, but also it could help in the selection of personnel, among others.

References

- Jorna, M., Ball, K., & Salmon, J. (2006). Effects of a holistic health program on women's physical activity and mental and spiritual health. *Journal of science and medicine in sport*, 9(5), 395-401.
- Kennedy, M., & McKenzie, N. (2019). 19 Working with body and mind-trauma-informed somatic psychotherapy. *Humanizing Mental Health Care in Australia: A Guide to Trauma-informed Approaches*.
- Kohlmann, S., Gierk, B., Hilbert, A., Brähler, E., & Löwe, B. (2016). The overlap of somatic, anxious and depressive syndromes: A population-based analysis. *Journal of psychosomatic research*, 90, 51-56.
- McIntosh, DN (1996). Facial feedback hypotheses: Evidence, implications, and directions. *Motivation and emotion*, 20(2), 121-147.
- Yanartaş, Ö., Kani, HT, Kani, AS, Akça, ZND, Akça, E., Ergün, S. & Sayar, K. (2019). Depression and anxiety have unique contributions to somatic complaints in depression, irritable bowel syndrome and inflammatory bowel diseases. *Psychiatry and Clinical Psychopharmacology*, 1-9.

chos patrones de activación podrían manifestar emociones, en ocasiones, difíciles de expresar verbalmente tales como el miedo, la vergüenza o el sentimiento de abandono.

Estudios como los mencionados nos han permitido acercarnos a lo que muchos denominan como técnicas psicoterapéuticas de cuarta generación, tales como la programación neurolingüística, el EMDR, el focusing o las técnicas EFT de liberación emocional. A estas técnicas se les otorga la capacidad de producir cambios emocionales de una manera eficaz y rápida, actuando directamente sobre la relación mente-cuerpo cambiando el significado de las memorias emocionales que han sido bloqueadas en nuestro sistema nervioso. La relación entre nuestros pensamientos y emociones es hartamente conocida; sin embargo, como hemos podido constatar, la relación bidireccional entre nuestras emociones y nuestras reacciones corporales apenas se está redescubriendo con resultados realmente prometedores. Este tipo de terapias de cuarta generación tienen críticos empedernidos pero también defensores muy entusiastas; y aunque deberá ser la investigación la que ratifique y consolide su eficacia, nos abre el camino a descubrir lo que podemos denominar como nuestro código corporal.

Descifrar, en su totalidad, el código de nuestro cuerpo podría tener no sólo aplicaciones terapéuticas sino también en el ámbito de la selección de personal, entre otros.

Comment to “Our body code. Deciphering the meaning of body and somatomorphic manifestations from an integrative perspective“

by Daniel Eytan (Israel)

I want to comment on what Miguel Ángel Alcarria writes about „The Interrelationships between Mind and Body“, I will try to explain the meaning of body and somatomorphic manifestations from an integrative perspective, and I'll try to explain my point of view as believer in Jesus, and clinical and educational psychologist, from a Israeli-Jewish background:

Miguel Angel article start with: „Christianity gives great value to the human body. The reason for this great value lies in the fact that the body, biblically, has a close link with the image of God...and we agree with that. Because the creation of man, „the crown of creation,“ is the culmination and end of the six days of the story of the creation of the biblical world. In the original Hebrew, we can read from Genesis 2:7 :

רֵפֶעַ מְדֹא-הַתָּא-סִירְחָלָה וְהַרְצִיְנָה
תְמִשְׁנָה וְיִפְאָבָבָה מְדֹא-הַגְּנָם
חַרְחַשְׁפָּגָלָל מְדֹא-הַרְגָּנוּסָה;

Then the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul
The Interrelationships between Mind and Body
Miguel Angel continues with a brief historical description about psychology and its changes, I intend to remember something that we also learned from Greek and Jewish sources, long before Freud appeared, and as also from ancient times, how body and soul were related.

Psychology is a field of social science that deals with the study of the mind, perception and behavior, and its purpose is to investigate and to deal with (using different psychological techniques) human and animal behaviors.

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The premise of the science of psychology is that there is a lawfulness in human behavior, and that it must document and measure this law. Psychology says that behavior does not occur by accident, but rather is the result of a system of laws, the understanding which allows us to derive a certain prediction about the future. Every field of psychology deals with other aspects of behavior, and tries to understand it through a different focus. Psychology is divided into branches of research, fields of practice and schools.

The philosopher Plato advocated mental therapy of „mental patients“ who have a conflict between the different parts of the psyche through a philosophical discourse called Platonic Dialogue.

The Greek philosopher Aristotle was the first to devote a book to the study of the human psyche. René Descartes laid important foundations for modern psychology. Many see the beginnings of psychology already in the period of ancient Greece in the thought of Socrates, Plato, Aristotle and Hippocrates when they raise questions such as the essence of human soul, consciousness and ways of behavior. Hippocrates begins his book by having three persons: natural, vital, and intellectual. In Plato (427 / 8-347 BC), the soul as an entity occupies a central place; for him the soul is divided into three components: rational, emotional, and instinctual, with

mental illness perceived as a conflict and a rupture between the different parts of the psyche. It must be treated through the philosophy and knowledge of the truths of being by means of a Platonic dialogue.

His most famous student, Aristotle (384-322 BCE), wrote the „first book of psychology“ („On the soul“), in which he classified all being into matter and form, and saw the human soul as the „form“ of man. The animals of the creatures are in the form of a pyramid, in which the human soul stands above the animal mind, which stands above the plant's vegetative personality. In Aristotle's opinion there is a sixth sense, the „common sense,“ which is the sense that processes all stimuli which are transmitted from the five senses into significant information. Aristotle saw in the middle way that man adopts „middle“ mental qualities that move away from the extreme manifestations of traits. The best that the ethical person must adopt through his personal education.

Maimonides (1138-1204), one of the greatest Jewish poskim (Jewish legal authority), a philosopher and physician, stated in his introduction to Tractate Avot, that the human soul is a unitary entity, and only has different manifestations, and therefore the vitality of the human soul spreads over the entire human body. He believed that man's biological power is different from the biological forces of animals, and he believed that man was born as a smooth, but willing to accept certain tendencies, influenced in his opinions and actions mainly by his friends and the customs of his people. He argued, against Plato,

that learning philosophy itself would not make a person, and the main path must be in practice in corrective action, which means doing deeds of the desired nature, so that the actions will leave their mark on the soul.

He also believed that the correct mapping of the middle path exists in the mitzvot of the Torah, which aim to bring man into balance in all aspects of his soul... and the list is endless about ideas, theories, books and techniques about psychology and its individual or collective application.

And it takes me to remember, and it takes me to remember and compare, (perhaps in a more dynamic thinking) the book of James when he says, „As the body without the spirit is dead, so faith without deeds is dead“ But the truth is that referring to the „Scriptures“ we can see both in the old and new testament a „phrase“ that encapsulates the monotheistic essence of Judaism: „Hear, O Israel: the LORD our God, the LORD is one“ (Hebrew: שְׁמֵעָנָה יְהֹוָה יְהֹוָה אֶחָד, Deuteronomy 6: 4).

Observant Jews consider this word (Shema Israel) to be the most important part of the prayer service in Judaism.

And the most observant of them all, who could really fulfill all the writing, reminds us on Matthew 22:37: „Love the Lord your God with all your heart and with all your soul and with all your mind“

I hope that we will be able to make this text, like Him, every day in order to balance body and soul, and to illuminate its light through us.

Jacoba van der Werf (Netherlands) EMDR and the body in Christian therapy

I am a Dutch psychologist, living in Berlin, Germany. I have a practice for psychotherapy, called true colours, where I do marriage counseling and work with EMDR.



Have you ever felt afraid of something, that wasn't really dangerous? I remember my first encounter with a cockroach in a hotel room in Florida. As soon as I saw it, I screamed and jumped up on the bed, hugging my body and demanding of my husband to get rid of it. Of course I knew that the cockroach could not really harm me, and actually I felt a bit silly, but I could not bring myself to come down from the bed. My husband solved the situation by calling the front desk and they gave us a new room. This is, in miniature, what happens, when you have a trauma. Only with trauma the feelings are far more overwhelming. I knew I was not in danger, but I could not stop my flight reaction. In trauma we can tell ourselves that the traumatic event is over. Yet we cannot control the powerful feelings and bodily reactions, telling us we are still in mortal danger and should get ready to flee or to fight.

In this article I would like to show how EMDR (Eye Movement Desensitisation and Reprocessing), which is an effective trauma therapy, can be used in healing trauma. I will talk about the role of the body in this process and how this therapy can be integrated in Christian psychotherapy. But first of all I would like to say a little bit about the role of the body in the bible.

Jacoba van der Werf (Netherlands) EMDR en het lichaam in christelijke therapie

Ik ben een Nederlandse psycholoog uit Berlijn, Duitsland. Ik heb een praktijk voor psychotherapie, true colours, waar ik huwelijkstherapie aanbied en met EMDR werk.

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Ben je wel eens bang geweest voor iets, dat helemaal niet gevaarlijk was? Ik herinner me mijn eerste ontmoeting met een kakkerlak op een hotelkamer in Florida. Zodra ik hem zag, gaf ik een schreeuw en sprong op het bed, met mijn armen om mijn lijf geslagen. Ik riep mijn man om hem weg te doen. Natuurlijk wist ik, dat de kakkerlak niet echt gevaarlijk was en ik voelde me ook wel wat onbenullig. Maar ik kon me er toch niet toe brengen, van het bed af te komen. Mijn man loste de situatie op, door de receptie te bellen, die ons een nieuwe kamer gaf.

Dit is in miniatuur, wat er gebeurt als je een trauma hebt. Daar zijn de gevoelens veel overweldigender. Ik wist, dat ik niet in gevaar was, maar kon mijn vluchtrechtie toch niet beheersen. Bij een trauma kunnen we onszelf zeggen, dat de traumatische gebeurtenis voorbij is. Maar toch kunnen we de sterke gevoelens en lichamelijke reacties niet beheersen, die ons zeggen, dat we nog steeds in levensgevaar zijn en die ons klaar maken om te vechten of te vluchten.

In dit artikel wil ik laten zien, hoe EMDR (Eye Movement Desensitisation and Reprocessing), een effectieve traumatherapie, mensen met een trauma helpen kan. Ik wil het hebben over de rol van het lichaam in dit proces en hoe deze therapie geïntegreerd kan worden in christelijke psychotherapie. Maar om te beginnen, wil ik nog wat zeggen over de rol van het lichaam in de bijbel.

The body in the bible

In Christianity, for a long time the body was not seen as very important. We mainly focussed on the soul. The body was given a more or less negative role (J. Kahl, 1968).

In the bible body and soul are seen as a unity that cannot be separated. (Theologisches Begriffslexikon zum neuen Testament, 1990). Also the body has quite a positive image. God created us body, soul and spirit and "saw, that it was very good." Jesus came to us in a human body, and in the Lord's supper we remember His body, broken for us. When talking about the church, the bible talks about the body of Christ. And finally, at the end of our life, our soul will not "be released from the body", as from a prison (as in gnostic thinking), but we will receive a resurrection body.

So God gave the body an important meaning and the bible describes the body and the soul as a unity. If this is the case, then we should accept the importance of the body and explore how it can be integrated into psychotherapy.

The body in trauma

EMDR is a therapy form for treatment of PTSD (Post Traumatic Stress Disorder). Talking about traumatic events has shown to often do clients more harm than good. It seems to trigger them into reliving their traumatic events, without being able to find relief and healing. Why is this the case? Let's think about the development of a simple trauma. You are in a car accident and see yourself speeding into the pillar of a bridge. In this moment you cannot start thinking about the best option: do I turn the wheel left or right, which one will do the least harm to me and maybe also to others? There is no time to do so. In this moment your survival system kicks in: the amygdala, the part of the brain that automates your reactions. It doesn't work on a conscious level, and helps you to respond really fast, when you are in danger. So let's say you survived the accident with only a broken arm and some bruises and you are really relieved that nothing worse happened. The memories of the accident are now mainly stored in the amygdala, the part of the brain which is not responsive to speech. The problem with these memories is that they work on an unconscious level. The amygdala

Het lichaam in de bijbel

In het christendom heeft het lichaam lange tijd geen bijzondere plaats ingenomen. We concentreerden ons meer op de ziel. Het lichaam werd eerder als negatief gezien.

In de Bijbel zijn lichaam en ziel een onlosmakelijke eenheid (Hahn, 1990). Ook heeft het lichaam eerder een positief image. God heeft ons geschapen met lichaam, ziel en geest, „en Hij zag, dat het heel goed was“. Jezus kwam op de aarde in een menselijk lichaam en tijdens het vieren van het avondmaal denken we aan Zijn lichaam, dat voor ons verbroken is. Als het om ons christenen gaat, spreekt de Bijbel over het lichaam van Christus. En tot slot, aan het einde van ons leven, wordt onze ziel niet „vrijgelaten uit de kerker van ons lichaam“ (zoals in het Griekse denken), maar krijgen wij een opstandingslichaam.

God zelf geeft dus het lichaam een belangrijke betekenis en de Bijbel beschrijft lichaam en ziel als een onlosmakelijke eenheid. Als dit zo is, dan moeten wij het belang van het lichaam ook aannemen en onderzoeken, welke rol het speelen kan in de psychotherapie.

Het lichaam in trauma

EMDR is een therapiervorm, die bijzonder effectief is in de behandeling van PTSD (Post Traumatic Stress Disorder). Praten over een traumatische ervaring richt bij clienten vaak meer schade aan, dan dat het helpt. Het schijnt, dat praten hen triggert, zodat ze hun trauma opnieuw doorleven moeten, zonder dat ze verlichting en genezing vinden. Waarom is dat zo? Denken we eens aan de ontwikkeling van een simpel trauma. Je zit in je auto en plotseling merk je, dat je op een bruggenpijler af raast. Op dit moment kun je niet beginnen, na te denken over de beste mogelijkheid: „Wijk ik uit naar links of naar rechts? Wat richt de minste schade aan voor mij en misschien ook voor anderen?“ Daarvoor heb je geen tijd. Op dit moment begint je overlevenssysteem te werken: dat deel van je hersenen, dat zorgt voor automatische reacties (de amygdala). Het werkt op een onbewust niveau en helpt je, heel snel te reageren, als je in gevaar bent. Stel je voor, dat je het ongeluk overleefd hebt met alleen een gebroken arm en een paar kneuzingen. Je bent enorm opgelucht,

la can be reminded of the accident by triggers like driving in a car, seeing a bridge or hearing certain loud noises. Or also talking about the accident and all the feelings that were involved. It has learned that these are signs of danger to your physical integrity or even your life and will respond with feelings of fear and reactions in your body: your hands may sweat, your heart thump, your stomach contract, your muscles tense, etcetera. Your body is getting ready for fight or flight, to protect you. Like many people, you may also have flashbacks, where you do not simply remember, but feel that you are in the actual accident again. On a conscious level you can tell yourself that you are safe, but that will not convince you, because your amygdala does not respond to the conscious brain.

So when it comes to the body in trauma, we have the amygdala that seems to live a life of its own, beyond our control. And we have bodily reactions that prepare us for fight or flight, even though we know that we are not in danger anymore.

EMDR and the body

This is obviously a problem that needs a special solution. Talking about trauma has been shown to be of little help. We need a therapy that can help to process traumatic memories and to restore the influence of the conscious brain. We need to be able to tell ourselves that we are safe in such a way that we can actually hear it.

EMDR is a therapy that seems to be able to just this. Here I want to briefly explain what EMDR is and how it works in healing trauma. Then I will try to summarise from the preceding what role the body plays in EMDR.

What is EMDR?

EMDR is a therapy form, first developed by Francine Shapiro (Shapiro, 1989). It requires the clients to focus on the traumatic event which they experienced, and activate the different modalities of the memory that were relevant to them in that situation. They are asked to think about what happened, what emotions this memory brings up, what it makes them think about themselves (cognitions), and what bodily sensations they have while remembering the traumatic event. Traumatic memories are stored

dat er niks ernstigs is gebeurd. de herinneringen aan het ongeluk zijn nu hoofdzakelijk opgeslagen in de amygdala, een deel van de hersenen, dat niet op spraak reageert. Het probleem met deze herinneringen is, dat ze op een onbewust niveau werken. De amygdala kan aan het ongeluk herinnert worden door triggers, zoals autorijden, een brug die je ziet of door harde geluiden. Én ook door te praten over het ongeluk en alle gevoelens, die dat wakker roept. Hij heeft geleerd, dat dit signalen zijn dat er gevaar dreigt voor je lichaam of zelfs voor je leven. Daarom reageert het met angst en lichamelijke reacties: je handen beginnen te zweten, het hart klopt je in de keel, je maag verkrampt zich, je spieren worden aangespannen, enz. Je lichaam maakt zich klaar voor een vecht- of vluchtreactie om jou te beschermen. Je kunt flashbacks krijgen, waar je je niet alleen maar de traumatische situatie herinnert, maar waar je het gevoel hebt, je er weer middenin te bevinden. Op een bewust niveau kun je jezelf zeggen, dat je in veiligheid bent. Maar dat kan jou niet overtuigen, omdat je amygdala niet reageren kan op het bewuste deel van je hersenen.

Dus als het gaat om het lichaam bij trauma, dan hebben we het te doen met de amygdala, die een eigen leven lijkt te leiden, en waar wij geen invloed op uit kunnen oefenen. En ook met lichamelijke reacties, die ons klaar maken voor een vecht- of vluchtrespons, ook al weten we dat we niet meer in gevaar zijn.

EMDR en het lichaam

Hier is duidelijk sprake van een probleem, waarvoor een bijzondere oplossing nodig is. Praten over een trauma blijkbaar niet werkzaam. We hebben een therapie nodig, die helpen kan om de traumatische herinneringen te verwerken en om de invloed van het bewuste deel van de hersenen weer te herstellen. We moeten ons zelf kunnen zeggen, dat we in zekerheid zijn, zó dat we het ook horen kunnen.

EMDR is een therapie, die precies dit lijkt te kunnen doen. Hier wil ik kort beschrijven, wat EMDR is en hoe het kan helpen om een trauma op te lossen. Daarna zal ik aangeven, hoe de rol van het lichaam bij EMDR er uit ziet.

in the brain as a cluster, including all these modalities. The goal during EMDR is to activate this cluster as fully as possible. Thus, all memories can be processed. The clients are asked what negative cognition they have about themselves (self belief), thinking about the traumatic event ("I am helpless", "I will die", "I am not lovable", etc.) and also to think of a positive cognition, which they would rather think about themselves ("I can protect myself", "I am save now", "I am lovable", etc.). Then, while the client is focussing on all these things, the therapist leads the client in a series of bilateral eye movements (from left to right) to dissolve the trauma. It is also possible to use bilateral sensory or auditory stimulation.

EMDR has been subjected to much research (Bradley, R., Greene et al, 2005; Chen, Y. R., Hung, K. W. et al., 2014). The World Health Organisation suggests EMDR as one of two psychotherapies for PTSD (Post Traumatic Stress Disorder) (WHO 2013).

How does EMDR work in healing trauma?

Researchers are still puzzling over an explanation as to how EMDR works. (Landin-Romero, Moreno-Alcazar et al., 2018).

Slow wave sleep (which involves slow eye movements, similar to those in EMDR) can help re-organise memories, integrate new information and weaken traumatic memories (Landin-Romero, Moreno-Alcazar et al., 2018). This seems to be what happens during EMDR, suggesting that the eye movements work in a similar way as those in Slow Wave Sleep.

A finding of sleep research with traumatised people suggests that REM sleep is also involved in processing trauma. People with PTSD often wake up with nightmares when REM (Rapid Eye Movement) sleep begins (R. Greenberg, C.A. Perlman et al, 1972; B. van der Kolk et al., 1984). In those, they relive their trauma, coupled with strong emotions and bodily sensations. The normal process of passing on unconscious memories from the amygdala to the (conscious) cognitive memory trace seems to be blocked.

REM sleep has a number of functions, including memory processing and integrating emotionally charged memories into semantic networks

Wat is EMDR?

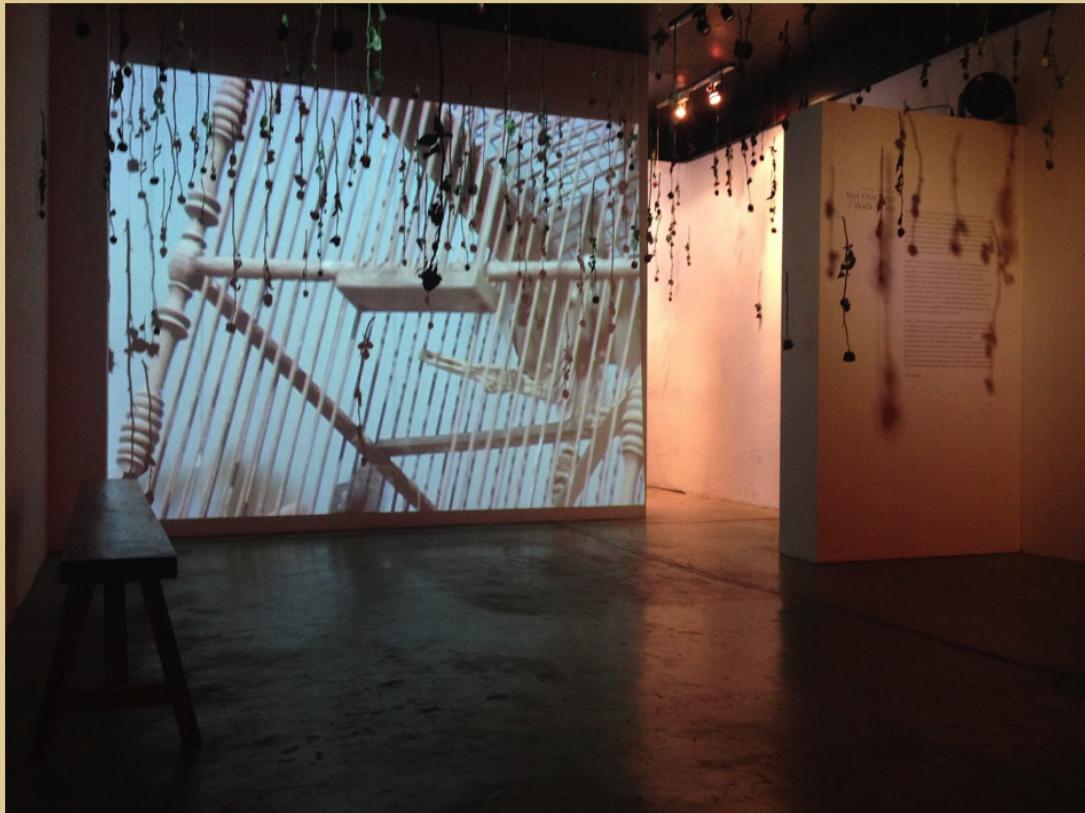
EMDR is een therapie, die ontwikkelt is door Francine Shapiro (Shapiro, (1989). Clienten wordt gevraagd, zich te concentreren op de traumatische beleving, die ze doorgemaakt hebben. Daarbij moeten ze alle modaliteiten van hun geheugen activeren, die van betekenis waren in die situatie: wat is er gebeurd, welke emoties brengt de herinnering naar boven, wat denken ze daarbij over zichzelf (cognities), en wat zijn de lichamelijke sensaties, die opkomen, wanneer ze aan het traumatische voorval denken. Traumatische herinneringen worden in de hersenen opgeslagen als een cluster, bestaande uit al deze modaliteiten. Het doel bij EMDR is dit cluster zo compleet mogelijk te activeren. Zo kunnen ook alle herinneringen verwerkt worden. De client wordt nu gevraagd, welke negatieve cognitie hij of zij heeft over zichzelf (self belief) bij het denken aan de traumatische situatie (b.v. „ik ben hulpeloos“, „ik ga dood“, ik ben het niet waard, dat iemand van me houdt“). Ook een positieve cognitie wordt gezocht, die de client liever over zichzelf zou denken („ik kan voor mezelf opkomen“, „ik ben nu in zekerheid“, „er zijn mensen, die van mij houden“). Terwijl de client zich op al deze dingen concentreert, leidt de therapeut zijn client in een serie van bilaterale ogenbewegingen (van links naar rechts), om het trauma te verwerken. Je kunt ook bilaterale sensorische of auditieve stimulatie gebruiken.

Er is veel onderzoek gedaan naar EMDR (Bradley, R., Greene et al, 2005; Chen, Y. R., Hung, K. W. et al., 2014) en de World Health Organisation heeft het tot een van twee effectieve psychotherapieën bij PTSD (Post Traumatic Stress Disorder) verklaard (WHO, 2013).

Hoe kan EMDR trauma verminderen?

Researchers zijn nog steeds bezig met de vraag, hoe EMDR werkt (Landin-Romero, Moreno-Alcazar et al., 2018).

Slow Wave Sleep (met langzame oogbewegingen, vergelijkbaar met die bij EMDR) kan helpen, herinneringen te organiseren, nieuwe informatie te integreren en traumatische herinneringen af te zwakken. (Landin-Romero, Moreno-Alcazar et al., 2018). Hetzelfde lijkt te gebeuren bij EMDR, wat suggereert, dat de



Not One Less

In 2017, Jason Dy, SJ did a project as fulfillment of his art residency coordinated by Perahu Art Connection and Project Space Pilipinas. Titled TAK SATUPUN (Not One Less), the culmination was a collaborative art performance at Makam Seniman Giri Sapto, which is an artists' cemetery in Yogyakarta, Indonesia. It was an action to remember the victims of Extra-Judicial Killings (EJK) in the Philippines. In ritual and in performance, the artist highlights time and space and what is presented here is an iteration that crossed cultures and geography.

(Born et al., 2006; Stickgold en Wehrwein, 2009). Similarly, EMDR seems to help the reorganization of traumatic memories and negative emotions (which are processed by the amygdala), reducing the strength of both (Stickgold, 2002; 2008).

Different parts of the brain seem to be involved. Research, using EEG before and after treatment with EMDR, show that the brain activity shifted from limbic structures (unconscious) toward the conscious part of the brain (Pagani, M., Di Lorenzo, et al., 2012).

There are more explanations to how EMDR works. But in an article on EMDR and the body, it seems fitting to decide on an explanation on the physical level. For a more comprehensive review, I refer to Landin-Romero, Moreno-Alcazar et al., 2018.

The role of the body in EMDR

In EMDR the body is important on different levels. First of all we have the eye movements, or if we prefer to use those, the auditory and tactile bilateral stimulation. Then we have the way the eye movements work on our neurological and brain processes. And finally we have the bodily sensations that play an important role in the therapy process.

By a traumatic experience, the body and the soul seem to have become disconnected. The traumatised person has all these bodily sensations that signal imminent danger and put this person in a state of vigilance, ready for fight or flight. The conscious brain tells them that there is no danger, but it cannot connect to the unconscious brain with all its bodily reactions.

EMDR seems to reunite body and soul, so that the person can experience healing in their thinking, emotions and bodily functioning.

EMDR in Christian therapy

EMDR is very tightly organised and does not leave a lot of room for the input of the counsellor. This is important to ensure that the desensitisation and reprocessing is not interrupted. We do not want the client to start thinking (on a conscious level) due to us asking questions or inserting our own comments. The healing process needs to go on undisturbed so that unconscious memories can be reached.

oogbewegingen bij EMDR een vergelijkbare werking hebben als die in de Slow Wave Sleep. Slaapresearch bij getraumatiseerde mensen lijkt erop te wijzen, dat de REM slaap ook een rol speelt bij de verwerking van trauma. Mensen met PTSD worden vaak wakker met nachtmerries, als de REM slaap (rapid eye movements) begint (R. Greenberg, C.A. Perlman et al, 1972), (B. van der Kolk et al., 1984). Ze herleven daarin hun trauma, wat gepaard gaat met heftige emoties en lichamelijke sensaties. Het normale proces, waarbij onbewuste herinneringen van de amygdala doorgegeven worden aan het (bewuste) cognitieve herinneringstraject, lijkt geblokkeerd te zijn.

De REM-slaap heeft meerdere functies, waaronder de verwerking van herinneringen en het integreren van emotioneel geladen herinneringen in semantische netwerken (Born et al., 2006; Stickgold en Wehrwein, 2009). Op dezelfde manier lijkt EMDR te helpen bij de reorganisatie van traumatische herinneringen en negatieve emoties (die verwerkt worden in de amygdala). Zo wordt de sterkte van die beiden afgezwakt (Stickgold, 2002; 2008).

Verschillende delen van de hersenen schijnen een rol te spelen. Het EEG van mensen, voor en na de behandeling met EMDR laat zien, dat de hersenactiviteit zich van het limbische systeem (onbewust) naar het bewuste deel van de hersenen verplaatste (Pagani, M., Di Lorenzo, et al., 2012).

Onderzoek met EEG voor en na de behandeling met EMDR laat zien, dat de hersenactiviteit zich verplaatst van het limbische systeem (onbewust) naar het bewuste deel van de hersenen (Pagani, M., Di Lorenzo, et al., 2012).

Er zijn meerdere verklaringen, hoe EMDR werkt. Maar in een artikel over EMDR en het lichaam, lijkt het passend, een verklaring op het lichamelijke niveau te kiezen. Voor een meer compleet overzicht van verklaringen verwijst ik naar Landin-Romero, Moreno-Alcazar et al., 2018.

De rol van het lichaam in EMDR

In EMDR is het lichaam belangrijk op verschillende niveaus. Ten eerste hebben we de oogbewegingen, of, als we dat beter vinden, de auditive en tactiele stimulatie. Dan hebben we de

Yet the Christian therapist can bring some elements to EMDR that I find to add value to it. These are a few of the things that have become important to me while working with EMDR. They are not meant to be comprehensive and I am sure other Christian therapists can add some brilliant ideas to this list. This is meant only as a first impression of how Christians can work with EMDR. I will orient myself on the eight phases of EMDR, designed by Shapiro (Shapiro, 2018), showing how my Christian values find a place in them. Even though I have not added elements to every phase, I describe all of them to give an idea of how EMDR works as a whole.

Phase 1: Diagnostic and planning of the treatment

The first thing to do, of course, is to establish a good, safe and respectful client-therapist relationship. The traumatised client is vulnerable and needs to be offered a safe environment. But at the same time, he or she is an equal partner in therapy, being the expert in his or her own experiences. To treat clients with love and respect is an important part of EMDR and not specifically Christian. But it is an attitude that is definitely in conformity with Christian work ethics. In this phase the therapist carries out a thorough diagnostic: the symptoms, the trauma and stressful life events. It is important to be sensitive to how the client is doing. When memories become overpowering, we should not press on. Diagnostics include deciding if the person has enough physical and psychological stability to endure the strong bodily sensations, emotions, thoughts and memories that will be activated during EMDR.

Touching upon the trauma, we can very easily trigger the person into experiencing their traumatic event again. Then they need to know that the counsellor will be there for them and will help them to calm down again. When the clients are open to that, I pray with them, inviting God to be there and to accompany the healing process. If this is not possible, I pray for the client silently. I would not miss involving God in therapy: He has often helped me, in small ways, but also in situations that seemed impossible.

After diagnostics have been done, we plan the therapy together with the client.

inwerking van de oogbewegingen op onze neurologische en hersen processen. En als derde zijn daar nog de lichamelijke sensaties, die een belangrijke rol spelen in het therapieproces. Door een traumatische ervaring lijken lichaam en ziel (psyche) ontkoppeld te worden. De ge-traumatiseerde persoon heeft allerlei lichamelijke sensaties, die signaleren dat gevaar dreigt en die hem of haar in een waakzame toestand brengen, klaar om te vechten of te vluchten. Het bewuste deel van de hersenen zegt hun dat er geen gevaar is, maar het heeft geen verbinding met het onbewuste deel van de hersenen, met al zijn lichamelijke reacties.

EMDR lijkt lichaam en ziel weer bij elkaar te brengen, zodat het denken, de emoties en het lichamelijk functioneren weer samengebracht worden.

EMDR in christelijke therapie

EMDR is heel precies georganiseerd en laat niet veel plaats voor de input van de counsellor. Dit is ook belangrijk, zodat de desensitisatie en het reprocesseren niet onderbroken worden. We willen niet, dat de client begint na te denken (op een bewust niveau), door ze vragen te stellen of door onze eigen commentaren af te geven. Het genezingsproces moet ongestoord verder kunnen lopen, zodat onbewuste herinneringen bereikt kunnen worden.

Maar toch kan de christelijke therapeut een paar elementen toevoegen aan de EMDR, die, naar mijn mening, waardevol zijn. Hier wil ik een aantal elementen noemen, die ik als belangrijk heb ervaren bij mijn werkt met EMDR. Ze zijn niet allesomvattend en ik denk, dat andere christelijke therapeuten nog vele brillante ideeën aan deze lijst kunnen toevoegen. Ik wil slechts een eerste indruk geven, hoe christenen kunnen werken met EMDR. Ik neem de acht fasen van EMDR, die Shapiro (Shapiro, 2018) ontwikkeld heeft als uitgangspunt, om te laten zien, hoe mijn christelijke waarden daarin een plaats krijgen. Hoewel ik niet aan iedere fase elementen heb toegevoegd, beschrijf ik ze alle acht, om een overzicht te geven, hoe EMDR als geheel werkt.

Fase 1: Diagnostiek en planning van de behandeling

Phase 2: Preparing and stabilising the client

This phase is meant to prepare the client for re-living their trauma (ideally in small bites) during EMDR. It involves psychoeducation about trauma and EMDR. Also in this phase the clients need to gain enough stability to deal with their trauma. This can be done by activating their individual resources. They can be anything that makes a person feel more stable, e.g. thinking of their moment of excellence (where they achieved something extraordinary), thinking about their family, hearing a favourite song, etc. I also find it helpful to see to what degree the relationship to God is a resource to the client. If appropriate, I encourage them to think about how they feel God is there for them. Sometimes a bible verse or simply a biblical truth can be comforting to them and be a strong resource. Another element of EMDR is to establish a safe place. This is a mental exercise, which also provides a resource when memories become overpowering. The clients create a place in their mind that makes them feel happy and safe. This can be a beautiful meadow with flowers, a mountain top, or a place by the sea, or whatever the client comes up with. Then they can fill in the details, so that it becomes a place where they feel really happy and safe. Many therapists encourage people to invite spiritual beings into this place. As a Christian I suggest people that they can invite God, in the Person that is most comforting to them (Father, Son, Holy Spirit). Many people already do this without being prompted.

Phase 3: Assessment

Here the client is asked to choose a traumatic event to work on and picture it along with all its visual, affective and sensory components and to rate their stress level. Then the client needs to find the negative cognition about him- or herself (self belief) which he or she has, thinking about the traumatic event (I am in danger, I am dirty (sexual abuse), I am helpless, etc.). Then a positive cognition is found: what the client would rather believe about him- or herself. This cognition needs to be rated as to how true it feels to the client. When people have trouble finding a positive cognition, I encourage them to think of what God would say to them in their trauma (you are safe with Me, you are my be-

Het eerste wat natuurlijk belangrijk is, is om een goede, veilige en respectvolle client-therapeut relatie op te bouwen. De getraumatiseerde cli-ent is kwetsbaar en heeft een veilige omgeving nodig. Maar tegelijkertijd is hij of zij een gelijk-waardige partner in de therapie, als expert voor de eigen beleveniswereld. Mensen met liefde en respect te behandelen is een belangrijk deel van EMDR en niet specifiek christelijk. Maar het is in ieder geval een houding, die past bij een chri-stelijke werkethiek.

In deze fase voert de therapeut een grondige diagnostiek uit: de symptomen, het trauma en belastende belevenissen. Het is belangrijk om te kijken, hoe het de client daarbij gaat. Als de her-inneringen overweldigend worden, moeten we daar niet op doorgaan. Bij de diagnostiek hoort ook, te kijken of de client genoeg lichamelijke en psychische kracht heeft om opgewassen te zijn tegen de sterke lichamelijke sensaties, emo-ties, gedachten en herinneringen, die door de EMDR geactiveerd worden.

Als een trauma ter sprake komt, kunnen clien-ten heel gemakkelijk getriggert worden en in hun traumatische situatie teruggezet worden. Dan moeten ze weten, dat de counsellor het op kan vangen en ze helpt om weer tot rust te ko-men. Als de cliënten daarvoor openstaan, bid ik met ze, dat God komt en het genezingsproces begeleidt. Als dat niet passend is, bid ik, in stil-te voor de client. Ik zou het niet willen missen, God in de therapie te betrekken: Hij heeft me vaak geholpen, in kleine dingen, maar ook in situaties, die onmogelijk leken.

Nadat de diagnostiek afgesloten is, wordt het therapieplan in overleg met de client vastgelegd.

Fase 2: De client voorbereiden en stabiliseren

In deze fase wordt de client erop voorbereid het trauma te herleven (het beste in kleine stapjes) met EMDR. De client wordt voorgelicht over trauma en EMDR (psycho-educatie). Daarnaast moeten de cliënten stabiel genoeg zijn, om met hun trauma om te kunnen gaan. Dit doen we door het activeren van hun persoonlijke re-sources. Dit kunnen alle mogelijke dingen zijn, die de persoon helpen zich stabiever te voelen. Voorbeelden zijn: denken aan je „moment of excellence“ (waar je iets bijzonders gepresteerd hebt); je familie; een lievelingslied horen, etc.

loved child, you are strong in Me, etc.).

Phase 4: Desensitisation

Now the actual EMDR process starts. Here the therapist more or less follows the lead of the client. Thinking of the traumatic event that was chosen in the assessment phase, the client is led into a series of eye movements. The associations that the client has during this time will be used to continue processing the traumatic memories with more eye movements. Here the counsellor has a supportive and guiding role, and it is helpful for the EMDR process if he or she stays in the background.

Sometimes the EMDR process reaches a mental block and the client keeps having the same negative associations without being able to process them. In this situation the counsellor can become more active and weave in some truths that are helpful to the client to overcome this obstacle. For example, when a victim of sexual abuse cannot believe she is lovable. Or a person who has sinned cannot believe that God will forgive him. Here, besides more general truths, I also like to use biblical truths if that seems fitting in the situation. I then help the client process them with a series of eye movements. This can help to overcome obstacles and set the processing of memories in motion again.

Phase 5: Installation

When the reprocessing of (part of) the trauma is complete, we take time to strengthen the positive belief that the client chose at the beginning of the process. We ask, whether this self belief is still suitable, or if it should be replaced by something that seems to be more appropriate to the client now (for example: "I am safe", after processing may change into "I can protect myself"). Here clients sometimes like to insert a truth about themselves that God has put into their hearts (like "With God's help I can deal with this"). The positive cognition is anchored with slow bilateral stimulation until it feels true.

Phase 6: Body scan

After the positive cognition has been anchored, we have our clients think of the original traumatic event, together with the positive cognition. Then we let them scan their body to see if

Hier vraag ik cliënten ook, in hoeverre de relatie met God een resource voor hen is. Als dat het geval is, moedig ik ze aan, erover na te denken, hoe God hen ondersteunt. Soms kan een bijbelvers of een bijbelse waarheid troostend en een sterke resource voor hen zijn.

Een ander deel van EMDR is het „inrichten“ van een veilig plekje. Dit is een mentale oefening, die ook als resource dienen kan, als de herinneringen te overweldigend worden. Cliënten creeëren een plekje in hun gedachten, waar ze zich gelukkig en veilig voelen. Dit kan een groene wei zijn met bloemen, bovenop een berg, een plekje aan de zee, of wat ze verder nog mooi vinden. Ze kunnen het zo invullen, dat ze zich er heel veilig en gelukkig voelen. Veel therapeuten moedigen mensen aan om geestelijke wezens uit te nodigen. Als christen zeg ik mijn cliënten, dat ze God kunnen uitnodigen, in de persoon die het meest troostelijk voor hen is (Vader, Zoon, Heilige Geest). Veel mensen doen dat zelf al, nog voordat ik wat gezegd heb.

Fase 3: Assessment

Hier kiest de cliënt een traumatische situatie uit om daaraan te werken en stelt zich die voor met alle visuele, affectieve sensorische componenten. Dan wordt ingeschat, hoe belastend die ervaring is. Ook wordt gevraagd, welke negatieve cognitie (self belief) de cliënt heeft bij het denken aan de traumatische beleving („ik ben in gevaar“, „ik ben smerig“ (seksueel misbruik), „ik ben hulpeloos“, etc.). Dan wordt een positieve cognitie gevonden: hoe wil de cliënt liever over zichzelf denken. De cliënt geeft een inschatting, hoe waar zich deze cognitie aanvoelt. Als mensen moeite hebben, een positieve cognitie te vinden, laat ik ze nadenken over wat God tegen hen zou zeggen in deze situatie („je bent veilig bij mij“, „jij bent mijn geliefd kind“, „je bent sterk in mij“, etc.).

Fase 4: Desensitisatie

Nu volgt het eigenlijke EMDR proces. Hier volgt de therapeut min of meer de cliënt. Beginnend met de beleving die in de assessment-fase gekozen is, volgt de cliënt de vinger van de therapeut met zijn ogen. De associaties die de cliënt heeft in deze tijd worden gebruikt om ze verder te verwerken met oogbewegingen. Hier

there is any tension left. Any sensory memory fragments of the trauma are then dissolved by bilateral stimulation with the positive cognition in mind.

Phase 7: Closure

This phase ensures that the client leaves the therapy session feeling better than at the beginning. If the traumatic experience could not be fully processed in a single session, the counsellor makes sure that the client regains a certain stability. Also the client is offered some exercises to deal with overpowering feeling at home. They are encouraged to keep a trauma diary, with memories that come up, and themes from it can be used for processing in the next session. Finally, the client receives information about how the reprocessing of the trauma may go on during the time between sessions.

I do not have much to add to this phase as a Christian counsellor. But also here I do very much like the way it empowers people and does not leave them helplessly at the mercy of their trauma. I think this is in agreement with our Christian values.

Phase 8: Reevaluation

This reevaluation opens each new therapy session. The client is asked if the positive effects of the treatment have been maintained and how the period at home between sessions has been. Often the reprocessing continues, and clients may find that the target of the last session has not been completely dissolved. The stressful memories can be further reprocessed with EMDR. Also new targets may have come up. This will show the direction in which client and therapist can work. If nothing has come up, the reprocessing of other traumatic memories can be continued.

We are living in a time of war. Embedded in the performance shown in the video are a series of rituals: a flower sacrifice, a prayer on the hill and the release of cages. To recreate it, there are elements to make the time clearer, even more tactile. The possible dehydration of the flowers and the maturing of the chicks represent the permanence of the ritual and the performance and transform both actions into one. Each ele-

heeft de counsellor meer een ondersteunende rol en het is goed voor het EMDR proces, dat hij of zij zich op de achtergrond houdt. Soms tref je in het EMDR proces een blokkade aan en heeft de cliënt heeft steeds weer dezelfde negatieve associaties, zonder dat die verwerkt kunnen worden. Dan kan de counsellor zich meer actief inbrengen en waarheden inweven, die de client helpen, de blokkade te overwinnen. Als bijvoorbeeld een slachtoffer van seksueel misbruik niet geloven kan, dat ze het waard is, dat iemand van haar houdt. Of iemand, die gezondigd heeft niet geloven kan, dat God hem vergeven wil. Hier gebruik ik, naast meer algemene waarheden, ook graag bijbelse waarheden, als dat past in de situatie. Deze worden dan verwerkt met een serie van oogbewegingen. Dit kan helpen om blokkades te overwinnen en het verwerkingsproces weer op gang te brengen.

Fase 5: Installatie

Als het reprocesseren van (een deel van) het trauma afgesloten is, nemen we de tijd om de positieve cognitie, die de client aan het begin van het proces gekozen had, te versterken. We vragen na, of die nog steeds past of dat er een cognitie is, die de client nu beter vindt („Ik ben in veiligheid“ kan zich na het verwerkingsproces veranderen in „Ik kan mezelf beschermen“). Hier kiezen clienten soms ook voor een bijbelse waarheid, die God hun op het hart gelegd heeft (zoals „Met God’s hulp kan ik hiermee omgaan“). De positieve cognitie wordt verankerd met langzame bilaterale stimulatie, tot die waar aanvoelt.

Fase 6: Body scan

Na het verankeren van de positieve cognitie, laten we de client nogmaals denken aan de traumatische beleving, in combinatie met de positieve cognitie. Nu voelt de client in zijn of haar lichaam, of er nog ergens spanning over is. Alle sensorische herinneringsfragmenten aan het trauma worden dan opgelost met bilaterale stimulatie, terwijl de client denkt aan de positieve cognitie.

Fase 7: Afsluiting

Deze fase zorgt ervoor, dat clienten met een beter gevoel naar huis gaan dan waarmee ze



Space. We need space for collective remembrance and healing. This exhibition builds for us an environment for contemplation. The artist taps on the potential of ritual as an activity that shows “opposition to a problematic social structure.[1]” Acting as both artist and priest, Dy alternates his roles for a transformative process therefore using art not just as a response or substitute, but pushes it towards being a spiritual experience to blur the boundaries of the two. Our immersion to the plotted symbols challenges us to transform ourselves to move our society away from oppressive conditions.

ment of the exhibition has strong meanings, such as the story of a person we are too familiar with today: asking for justice, commemoration of lived life and abandoning personal reflexivity in the midst of this bloodbath.

Elements that I bring to EMDR as a Christian First there is the work ethic, which I try to live by. This includes providing a safe environment and treating people with respect as a partner in therapy, empowering them to deal with memories that may flood them between sessions. As mentioned before, this is already an important part of EMDR and not my idea. But I think it is in agreement with Christian values.

Second, I pray with my clients, if that is possible, or otherwise for them privately. This has often made a difference for me (and my clients) in therapy.

Then clients can think about how God is a stabilising resource to them, using bible verses or biblical truths. Also, God can be invited to be in the “safe place” with the clients.

Furthermore, what God would say about people in their traumatic situation can be of help in finding a positive cognition.

Finally, the counsellor can weave in biblical truths when the EMDR process comes to a halt because of a mental block.

Is EMDR compatible with Christian psychotherapy?

So it is possible to add some Christian elements to EMDR. But how is EMDR compatible with Christian psychotherapy?

To answer this question, let us have a look at the most prominent element of this therapy form, the eye movements. This is not something we can find in the bible. But what I do find is this: "I thank you because I am awesomely made, wonderfully; your works are wonders, I know this very well" - Psalm 139: 14 (Complete Jewish Bible). One of the awesome, wonderful things that God created us with is a way to process memories. We do not simply remember everything we encounter in life. Rather, our brain makes a selection of things that are important to us. The amygdala works as a filter, and when we sleep, during REM (Rapid Eye Movement) and Slow Wave Sleep, the important memories are passed

gekomen zijn. Als de traumatische ervaring in één sessie niet volledig verwerkt kan worden, zorgt de counsellor ervoor, dat de client een zekere stabiliteit herwint. De cliënt krijgt dan ook enige oefeningen mee, om thuis met de overweldigende gevoelens om te kunnen gaan. Ze kunnen thuis een traumadagdoek bijhouden, van herinneringen, die naar boven komen, en die dingen kunnen weer verwerkt worden in de volgende sessie.

Tot slot krijgt de client nog informatie over hoe de verwerking van het trauma nog doorgaat in de tijd tussen de therapiesessies.

Als christelijke counselor heb ik niet veel toe te voegen aan deze fase. Maar ook hier vind ik de manier waarop mensen sterk gemaakt worden en ze niet weerloos aan hun trauma overgeleverd hoeven te blijven, zinvol en in overeenstemming met christelijke waarden.

Fase 8: Herevaluatie

Elke nieuwe therapiesessie begint met een herevaluatie. Er wordt nagevraagd of de positieve effecten van de vorige keer zijn gebleven en hoe de tijd tussen de sessies geweest is. Vaak gaat het reprocesseren thuis nog verder en het kan gebeuren, dat de herinnering van de vorige keer nog niet helemaal verwerkt is. De belastende herinneringen kunnen verder behandeld worden met EMDR.

Er kunnen ook nieuwe herinneringen bovenkomen. Dit geeft dan de richting aan, waarin therapeut en client verder kunnen werken. Als de client verder niets heeft, kan het reprocesseren van andere traumatische herinneringen worden voortgezet.

Elementen, die ik als christen meebreng bij EMDR

Ten eerste is er mijn werkethiek, waarnaar ik probeer leven. Dit betekent, dat ik een veilige omgeving schep, mensen met respect behandel, als partner in de therapie, en de client sterk, om ook zelf om te kunnen gaan met overweldigende herinneringen. Zoals al eerder gezegd, is dit al een belangrijk deel van EMDR zelf en niet mijn idee. Maar ik denk, dat het in overeenstemming is met christelijke waarden.

Ten tweede bid ik met mijn clienten, als dat mogelijk is, of anders zonder dat ze het horen. Dit

on to the conscious brain. God has created us with eye movements to process memories. That seems to be a good reason for us to explore how they can also be beneficial in helping people with traumatic memories.

Another important element in EMDR is to begin with some negative belief that you have in relation to the trauma, and to replace it by a positive one. We can help clients to stop believing lies about themselves and to embrace God's truth. This is in agreement with the renewing of the mind in Romans 12, verse 2: "Do not be conformed to this age, but be transformed by the renewing of your mind, so that you may discern what is the good, pleasing, and perfect will of God".

It seems to me that this is a good biblical basis for including EMDR in Christian counselling, using the brain processes that God made and helping people to believe the truth about themselves.

Conclusion

As we have seen, trauma is a problem that involves the unconscious brain, with strong emotions and bodily sensations. It does not respond to the conscious brain, so we need a different kind of therapy that is able to influence the unconscious brain.

EMDR is a therapy that has proven itself effective in doing just this. It seems to reconnect the conscious and unconscious part of the brain, using psychological and also bodily elements. People with trauma can regain control over their emotions and bodily reactions and experience healing.

It seems possible to integrate EMDR in Christian psychotherapy. God himself created us with eye movements to process memories and the concept of replacing lies with the truth is thoroughly biblical. Also the work ethic in EMDR is in agreement with loving our neighbour as ourselves.

I think that EMDR would be a valuable contribution to Christian psychotherapy and my hope is that many more will include it in their way of working.

heeft mij (en mijn clienten) in een therapie vaak geholpen.

Ook kunnen clienten met bijbelse waarheden en verzen zien hoe God een stabiliserende factor is in hun leven. Ze kunnen God ook uitnodigen bij hen te zijn in hun veilige plekje. Verder kan dat, wat God over mensen zou zeggen in hun traumatische situatie, helpen om een positieve cognitie te vinden.

Tot slot kan de counselor bijbelse waarheden inweven, als het EMDR proces tot staan komt door een mentale blokkade.

Hoe past EMDR in een christelijke psychotherapie?

Het is dus mogelijk, om een paar christelijke elementen aan EMDR toe te voegen. Maar hoe past EMDR in een christelijke psychotherapie? Om dit te beantwoorden bekijken we als eerste het meest opvallende element van deze therapie, de oogbewegingen. Dit is niet iets, wat we in de bijbel vinden. Maar wat ik vind, is dit: "Ik prijs U, want het is een wonder hoe U mij heeft gemaakt. Alles wat U heeft gemaakt, is bijzonder. Ik weet dat heel goed." - Psalm 139:14 (BasisBijbel). Één van de wonderen, waarmee God ons geschapen heeft, is de manier, waarop wij herinneringen verwerken. We onthouden niet gewoon alles wat er gebeurt in ons leven. Onze hersenen selecteren die dingen, die belangrijk voor ons zijn. De amygdala werkt als een filter, en als we slapen, worden tijdens de REM-slaap (rapid eye movements, vert.: snelle oogbewegingen) en de Slow Wave Sleep de belangrijke herinneringen doorgegeven aan het bewuste deel van de hersenen. God heeft ons geschapen met oogbewegingen, om herinneringen te verwerken. Dat lijkt mij een goede reden om te onderzoeken, hoe deze mensen ook kunnen helpen met traumatische herinneringen.

Een ander belangrijk element bij EMDR is, met een negatieve gedachte over jezelf (self belief), in samenhang met het trauma, te beginnen, en die door een positieve gedachte te vervangen. We kunnen clienten helpen, geen leugens meer over zichzelf te geloven en om Gods waarheid over hun leven aan te nemen. Dit past bij de hernieuwing van ons denken in Romeinen 12, vers 2: „Jullie moeten niet meer op dezelfde manier leven als de ongelovige mensen. Maar leef

References

- J. Kahl, Das Elend des Christentums, 1968, 58.
- Theologisches Begriffslexikon zum neuen Testament, 1990, 869-875.
- Born, J., Rasch, B., and Gais, S. (2006). Sleep to remember. *Neuroscientist* 12, 410-424.
- Bradley, R., Greene, J., Russ, E., Dutra, L., and Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *Am. J. Psychiatry* 162, 214-227.
- Shapiro, 1989). Eye movement desensitization: a new treatment for post-traumatic stress disorder. *J. Behav. Ther. Exp. Psychiatry* 20, 211-217.
- Ying-Ren Chen, Kuo-Wei Hung, Efficacy of Eye-Movement Desensitization and Reprocessing for Patients with Posttraumatic-Stress Disorder: A Meta-Analysis of Randomized Controlled Trials, *PLOS ONE*, 2014.
- WHO 2013: https://www.who.int/mediacentre/news/releases/2013/trauma_mental_health_20130806/en/
- Landin-Romero, Moreno-Alcazar et al., How Does Eye Movement Desensitization and Reprocessing Therapy Work? A Systematic Review on Suggested Mechanisms of Action, *Frontiers in Psychology*, 2018.
- Pagani, M., Di Lorenzo, G., Verardo, A. R., Nicolais, G., Monaco, L., Lauretti, G., et al. (2012). Neurobiological correlates of EMDR monitoring - An EEG study. *PLOS ONE*.
- Marco Pagani, Benedikt L. Amann et al., Eye Movement Desensitization and Reprocessing and Slow Wave Sleep: A Putative Mechanism of Action, *Frontiers of Psychology*, 2017.
- R. Greenberg, C.A. Perlman et al., War neuroses and the adaptive function of REM sleep, *British Journal of Medical* 45, Nr. 1 (1972): 27-33.
- B. van der Kolk et al., Nightmares and trauma: a comparison of nightmares after combat with lifelong nightmares in veterans, *American Journal of Psychiatry* 141, Nr. 2 (1984): 187-90.
- Stickgold, R., and Wehrwein, P. (2009). Sleep now, remember later. *Newsweek* 153, 56-57.
- Stickgold, R. (2002). EMDR: a putative neurobiological mechanism of action. *J. Clin. Psychol.* 58, 61-75.
- Stickgold, R. (2008). Sleep-dependent memory processing and EMDR action. *J. EMDR Pract. Res.* 2, 289-299.
- Francine Shapiro, Eye movement desensitisation and reprocessing (EMDR) therapy: Basic principles, protocols and procedures, third edition, The Guilford Press (2018), ISBN 9781462532766.

als nieuwe mensen, doordat jullie op een nieuwe manier gaan denken, namelijk op Gods manier. Dan zullen jullie ook anders gaan leven. Dan zullen jullie weten wat Gods wil is. En alles wat Hij wil is goed, mooi en volmaakt“.

Er lijkt dus een goede bijbelse basis te zijn om EMDR in de christelijke hulpverlening op te nemen. We kunnen gebruik maken van de processen in de hersenen, die God gemaakt heeft, en mensen helpen, Gods waarheid over zichzelf te geloven.

Conclusie

We hebben gezien dat trauma een probleem is, dat samenhangt met het onbewuste deel van de hersenen, met sterke emoties en lichamelijke sensaties. Het reageert niet op het bewuste deel van de hersenen, dus hebben we een andere soort van therapie nodig, die het onbewuste deel van de hersenen kan bereiken.

EMDR is een therapie die bewezen heeft, precies dat te kunnen. Het lijkt het bewuste weer met het onbewuste te verbinden. Daarbij maakt het gebruik van psychologische en lichamelijke elementen. Mensen met trauma kunnen de controle over hun emoties en lichamelijke reacties terugwinnen en genezing ervaren.

Het lijkt mogelijk om EMDR te integreren in christelijke psychotherapie. God zelf heeft ons geschenken met oogbewegingen om herinneringen te verwerken en het concept, leugens door waarheid te vervangen, is heel bijbels. Ook de werkethiek bij EMDR stemt overeen met het liefhebben van je naaste als jezelf.

Ik denk, dat EMDR een waardevolle bijdrage kan leveren aan de christelijke psychotherapie, en mijn hoop is, dat velen het in hun manier van werken op zullen nemen.

Comment to “EMDR and the body in Christian therapy”

by Colleen Ramser (USA)

A proper understanding of the body is crucial to our everyday journey as Christians, particularly as it relates to trauma. As a certified EMDR therapist and a trauma survivor who has experienced EMDR, I can offer a personal account as to how this form of treatment impacts the body and the soul.

As Van der Werf mentions, the body has been viewed negatively through much of Christian history. I see remnants of this belief in clients who struggle with how much attention to pay to “self” leading to similar concerns I have in some Christian institutions. The body is viewed as the avenue to destruction and therefore cannot be trusted. While this is certainly possible of us as permeable beings, we must acknowledge that the body is also the material host of our soul, in which we glorify God and move with both agency and free will.

Van der Werf supports this recognition of the body: We were created in God’s image with a body (Genesis 1:26-28), God the Son took on the fullness of human nature (body and soul) and became Jesus of Nazareth, the God-man (John 1:14, Philippians 2:6-8)), and God will one day resurrect our own physical bodies (John 5:28-29). Consider also Genesis 2:18-25, in which God chose to form Eve from Adam’s physical body and the narrative focuses on their being “naked and not ashamed.” In 1 Corinthians 6:12-20, we find a clear command to use our bodies for God’s purposes and glory. Throughout Scripture, Jesus was concerned not only with the formation of souls but with the healing of sick bodies (Matthew 9:35, John 9:6-7, Luke 17:12-16).

If God has designed our bodies for a purpose, then care for the body must be part of glorifying

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God here on earth. Empirical research shows us what happens when, conversely, the body is not cared for because trauma has occurred. In the most severe cases, trauma disrupts the part of the brain that registers our sense of self and leads to symptoms associated with Dissociative Identity Disorder. The self fragments into many personalities in order to cope with the intensity of the trauma. We know from observing brain imaging of individuals with Post Traumatic Stress Disorder that the body is responding as it should: a normal response to an abnormal event (van der Kolk, 2014). The Adverse Childhood Experiences Study then shows the long-term negative health effects of such traumas on the body. As Christians who seek to understand and integrate both body and soul, it seems logical to incorporate a treatment like EMDR that specifically addresses these bodily realities.

Divorced from a comprehensive understanding

of the body, well-meaning persons may unintentionally re-traumatize victims with shortsighted directives or simplistic application of Bible verses. Asking someone with a broken leg to seek more discipleship rather than medical attention, is analogous to Christians disregarding the impact of trauma. We as Christians do not question the working of the leg in physical therapy, yet we find it far-fetched to consider the brain's role in healing from trauma.

This is unfortunate because research shows that emotional and psychological trauma impacts the same part of the brain as does physical trauma (Siegel, 2010). Research also tells us that paying attention to the body's emotions, thoughts, and other internal processes nurtures our ability to pay attention to and empathize with others (Siegel, 2010). God designed our bodies for a purpose. Paying attention to our body leads to deeper connections in community with others.

Because we are interconnected in body and soul, a careful integration of body and soul is crucial to my practice as a certified EMDR therapist. Many people are understandably skeptical because questions remain as to the precise neurological processes contributing to EMDR's efficacy. But I would challenge: Must we understand all of its components if it spurs others on to whole living? If it is not hindering their faith?

I have often been asked if I talk about Jesus when I utilize EMDR with my clients. I respond to these questions by explaining that it is not uncommon for the inseparable operations of God to appear in imagery as Father, Son or Holy Spirit in a client's processing, quite separate from anything I have said to integrate spiritual formation into the overall therapeutic experience.

I can attest that in my experience utilizing EMDR, Jesus shows up – even in the deepest parts of our soul and body. It appears to be the Trinitarian God moving in the unconscious parts of my clients as they process their most painful traumas. A client's story of abuse may end in Jesus holding them, God reassuring them they are not alone, or holding hands with them on a playground. EMDR has given persons the ability to re-engage in community, re-

lationships, and the church rather than live in isolation. This work seems to fit well with the command to love God and love others.

I am privileged to see EMDR bring about life and connection in parts of a trauma survivor's body that once felt wholly disconnected. Persons who dissociated have grown to feel more connected to God in mind, soul, and strength. Reflecting on Jesus' ministry, I feel at times as though I am both encouraging others in their faith and facilitating healing in the body, utilizing EMDR for His glory.

EMDR is not the be all and end all, just as someone who goes to physical therapy may still have a leg that never quite feels or functions the same. We as Christian therapists are faced with balancing science and faith, with Scripture taking precedence. While there is no reference to EMDR in the Bible, this form of treatment seems to me to be a means of common grace. Like medicines that heal diseases, EMDR points toward life and not death.

Although an effective form of treatment, EMDR does not eliminate the sanctification process or life's suffering, for that matter. The soul still longs for more; it longs for heaven and EMDR offers no solution for this internal struggle. In that case, it is vital for EMDR to exist alongside spiritual formation if we as believers are to be concerned for both body and soul.

Reference List

Siegel, D. J. (2010). *Mindsight: The new science of personal transformation*. New York, NY: Bantam Books.

van der Kolk, B. (2014). *The Body Keeps the Score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking Penguin.

<https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html>

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Body-oriented mindfulness exercises in a Christian context

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Körperbetonte Achtsamkeitsübungen im christlichen Kontext

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Should Christian therapists, coaches and counsellors connect mindfulness exercises with spiritual truths of the Bible? Can Christians learn something from eastern mindfulness exercises, or do they fall into the danger of uncritically following the current boom in mindfulness, which does not deny its Buddhist roots?

In two very different cultural contexts, the therapist Helma Ziegler has had encouraging experiences in Egypt and Germany with her spiritual toolbox of body-oriented mindfulness exercises. The contrast in the therapeutic contexts is unbelievably stark: On one side the war-shaken inhabitants of Cairo in the Arab Spring, on the other the stress-burdened, identity-seeking population of the metropolitan region Berlin. From Helma Ziegler's report, it is clear that the

Sollten christlichen Therapeuten, Coaches und Berater Achtsamkeitsübungen mit geistlichen Wahrheiten der Bibel verknüpfen? Können Christen von fernöstlichen Achtsamkeitspraktiken etwas lernen oder geraten sie in die Gefahr, unkritisch dem aktuellen Achtsamkeitsboom zu folgen, der seine buddhistischen Wurzeln nicht verleugnet?

Die Therapeutin Helma Ziegler hat in zwei sehr unterschiedlichen kulturellen Kontexten in Ägypten und Deutschland ermutigende positive Erfahrungen mit ihrem geistlichen Werkzeugkoffer an körperbetonten Achtsamkeitsübungen gemacht. Der Kontrast der therapeutischen Kontexte ist unglaublich stark: Auf der einen Seite die krisengeschüttelten Bewohner Kairos im Arabischen Frühling, auf der ande-

pre-condition for a successful linking of mindfulness exercises and Biblical impulses is an exceptionally culturally-sensitive basic attitude:

“I find myself with a client in her early thirties in my practice in the centre of Berlin. She gives me a detailed account of how profession, home life and church demand too much of her. She is still at the beginning of her career ladder, but even now she gives me the impression of being jaded and tired, yes, even disillusioned because of the wide range of challenges she wants to meet. Her own reserves of strength, as perceived by herself, seem to have shrunk to a minimum. I ask what strategies she has already tried out in order to reduce stress and mention, besides sport, also meditation techniques and breathing exercises. At that, she casts an almost pitying glance at me!

I am familiar with this reaction, yes, I had almost been expecting it. I very often notice this or similar reaction patterns in believing clients. In conversation, I frequently find the following faith-based principles behind it: ‘How can I think about myself and simply sit down and do nothing? I would feel too self-centred, indeed egotistic! If I just sit around, I have the feeling that I not doing anything sensible with my time; after all, during this time I could do so much for God and other people!’

In a situation of this kind in a therapeutic context, my reaction is to question the faith-based principles that run throughout like sub-titles; my aim here is for clients to feel invited to step outside their western-coloured thinking, centred on efficient time-structuring of the daily programme, and risk something completely new, namely the adventure of allowing oneself a few minutes per day to inhale the proverbial oriental composure equanimity by using breathing exercises with contemplative meditation. For many years now, this question has occupied me: ‘How can I give clients who suffer from excessive stress, especially Christians of the most varied hues, useful hand-tools to take with them in daily life, if many of them feel the hair standing up on the back of their necks when they even think of meditation, imaginative exercises or mindfulness-based focusing?’

How could I offer my clients a framework within

ren Seite die stressbeladenen, identitätssuchenden Bürger der Metropolregion Berlin.

An Helma Zieglers Bericht wird deutlich, dass für die gelingende Verbindung von Achtsamkeitsübungen und biblischen Impulsen eine ausgeprägte kultursensible Grundhaltung Voraussetzung ist:

„Ich befindet mich mit einer Klientin Anfang 30 in meiner Praxis in Berlin Mitte. Sie berichtet mir ausführlich von ihrer Überforderung im Beruf, zu Hause und in der Gemeinde. Noch befindet sie sich am Anfang ihrer Karriereleiter, jedoch wirkt sie auf mich jetzt schon abgespannt und müde, ja desillusioniert aufgrund der vielseitigen Herausforderungen, denen sie sich stellen möchte. Ihre eigenen von sich selber wahrgenommenen Kraftreserven scheinen auf ein Minimum geschrumpft zu sein. Ich frage sie, welche Strategien sie bereits ausprobiert habe, um Stress abzubauen und neben Sport auch Meditationstechniken und Atemübungen als Beispiele. Sie wirft mir darauf einen fast mitleidvollen Blick zu!

Mir ist diese Reaktion vertraut, ja, fast habe ich sie schon erwartet. Ganz oft nehme ich an gläubigen KlientInnen solche oder ähnliche Reaktionsmuster wahr. Dahinter entdecke ich im Gespräch ganz oft folgende Glaubenssätze: „Wie kann ich an mich selber denken und mich einfach nur hinsetzen und nichts tun? Ich fühle mich zu selbstbezogen, ja egoistisch! Wenn ich nur so sitze, habe ich das Gefühl, meine Zeit nicht sinnvoll einzusetzen, ich könnte doch in dieser Zeit so viel für Gott und andere tun!“

In so einer Situation bedeutet es für mich im therapeutischen Kontext, diese wie Untertitel durchlaufenden Glaubenssätze so zu hinterfragen, dass sich die KlientInnen aus ihrer west-europäisch gefärbten Denkweise des effizienten getakteten Tagesablaufs eingeladen fühlen, etwas ganz Neues zu wagen, nämlich sich auf das Abenteuer einzulassen, sich täglich wenige Minuten zur Ruhe zu gönnen und durch Atemübungen mit kontemplativer Meditation orientalische Gelassenheit sprichwörtlich zu inhalieren.

Seit vielen Jahren bewegt mich die Frage: „Wie kann ich Klienten und speziell Christen verschiedenster Couleur, die an Überlastung leiden, Handwerkszeug in den Alltag mitgeben,

which they would feel supported and able to relax during a guided exercise? This becomes possible when the meditation, like a mindfulness exercise, has a stress-reducing effect and is simultaneously embedded in spiritual truths. How did I succeed in inviting many of my clients to take this path?

I am glad to say that I detect in society an increasing turning to, and reflection on, contemplative currents which have maintained their position over thousands of years. Meanwhile, a large quantity of specialist literature has provided us with plentiful descriptions of the demonstrated effect of contemplation/mindfulness (e.g. Pure Presence by Richard Rohr, or The Mindful Brain by Daniel Siegel). Nevertheless, I have made it a personal project to offer my clients an effective mindfulness training so that I can react flexibly to their particular cultural and spiritual needs. Before proceeding, however, I would like at this point to share with you about a turning point in my personal life which had decisive influence on my practice as a therapist and counsellor. During the years of the Arab Spring, 2011-2015, I lived in Cairo in Egypt and experienced this time as being on the one hand enormously challenging, and on the other hand deeply moving. In many regards, these four years have left a deep imprint on my life and work.

There are two directions in which one can translate the Arabic Al Quahira, Cairo, into English: ‘The Victorious’ or, alternatively, ‘She who crushes’.

In my case, I experienced both of these there. It was amid the disturbances following the overthrow of Mubarak that I arrived in this town, where anarchy reigned in the streets; the state organs of the police were present only seldom, or were ignored.

‘The Egyptians are good-humoured, happy and warm-hearted bunch,’ say people in the surrounding states. ‘With typical oriental hospitality, one is invited to every event with open arms and overwhelming smiles.’ – ‘You are heartily welcome in Egypt’: this is the phrase I could hear repeatedly on the street throughout my four years there.

I was invited to go on a tour through the desert to the Red Monasteries where, according to tra-

wenn sich bei vielen von ihnen schon bei der Vorstellung von Meditation, imaginativen Übungen oder achtsamkeitsbasierter Fokussierung die Nackenhaare kräuseln?“

Wie könnte ich meinen Klienten einen Rahmen bieten, in dem sie sich gehalten wissen und während einer angeleiteten Übung entspannen? Möglich wird dies, wenn die Meditation wie eine Achtsamkeitsübung stressreduzierend wirkt und gleichzeitig in geistliche Wahrheiten eingebettet ist.

Wie ist es mir gelungen, viele meiner Klienten auf diesen Weg einzuladen?

Erfreulicherweise stelle ich gesellschaftlich eine vermehrte Hinwendung und Rückbesinnung auf kontemplative Strömungen, die sich über die Jahrtausende erhalten haben, fest. Mittlerweile gibt es eine größere Anzahl von Beispielen aus der Fachliteratur, die die wissenschaftlich erwiesene Wirkung von Kontemplation/Achtsamkeit ausgiebig beschreiben (z.B. Pure Präsenz von Richard Rohr oder The Mindful Brain von Daniel Siegel). Nichtsdestotrotz habe ich mich selber auf den Weg gemacht, um meinen Klienten ein wirksames Achtsamkeitstraining anzubieten, damit ich auf ihre speziellen kulturellen und spirituellen Bedürfnisse flexibel reagieren kann. Zuvor möchte ich Sie aber an dieser Stelle an einem Wendepunkt in meinem persönlichen Leben teilhaben lassen, der einen entscheidenden Einfluss auf meine Praxis als Therapeutin und Beraterin hatte.

Ich habe in den Jahren des Arabischen Frühlings von 2011-2015 in Kairo in Ägypten gelebt und habe diese Zeit einerseits als enorm herausfordernd und andererseits zugleich als tief berührend erlebt. In vielerlei Hinsicht haben diese vier Jahre mein Leben und Wirken geprägt.

Al Quahira, Kairo, kann man vom Arabischen in zwei Richtungen ins Deutsche übersetzen: „Die Siegreiche“ auf der einen oder „Die Zermalmerin“ auf der anderen Seite.

In meinem Fall habe ich dort beides erlebt. Ich kam mitten in den Unruhen nach dem Sturz von Mubarak in die Stadt, wo auf den Straßen Anarchie herrschte; die staatlichen Organe der Polizei waren nur selten präsent oder wurden ignoriert.

„Ägypter sind ein lustiges, fröhliches und

dition, Paul of Thebes (born c. 228 A.D.) and Anthony of Egypt (born c. 251 A.D.), as the first hermits in church history, dedicated themselves to prayer and withdrew completely from other human contact. They belong to the Desert Fathers, who formed the starting point of a contemplative movement whose outworkings are still visible today in the spiritual exercises of the Orthodox Church. The visit to these places with their inhospitable surroundings in the middle of Egypt's Red Desert left a deep impression on me and made me grateful for the spiritual sources and traditions on which I can draw and in which I can, to a certain extent, take my place. In the wish to remain in constant contact with God, these Desert Fathers developed exercises entirely of their own which, in their physiologically-based effects, are astonishingly similar to breath meditations of the Far East.

After this visit in the desert, I looked at the spiritual exercises more closely, read more about the prayer of stillness as taught by Peter Dyckhoff, and began to practice a simple breath meditation myself. Gradually, I began to place the conventional mindfulness exercises, which of course originally come from the Buddhist tradition, in a Christian contemplative framework and to develop an eight-week training for a group setting.

During the power vacuum of the political transition in October 2011, in our neighbourhood Coptic Christians boldly demonstrated for their rights in the street in front of the Maspero building (TV). The military used force to put an end to the gathering, hundreds were injured, and sadly there were deaths. The reporting and pictures in the local media were for me intolerable.

My clients, most of them on the staff of various aid organisations and working increasingly on the limits of their emotional and physical strength, now benefited in daily life from my newly developed hand tools, which enabled them to regulate and reduce stress levels effectively themselves in such situations.

The political situation in the country was degenerating visibly, Mubarak was imprisoned and the Egyptian people had elected a new president. After a year, however, crowds were again gathering in Tahrir Square, seeking the over-

warmherziges Völkchen“, sagen die Bewohner der umliegenden Nachbarstaaten, „in typisch orientalischer Gastfreundschaft wird man mit offenen Armen und umwerfendem Lächeln zu jeder Gelegenheit eingeladen“ - „Herzlich willkommen in Ägypten“, das habe ich in meinen ganzen vier Jahren immer wieder auf der Straße hören können.

Ich wurde auf eine Wüstentour zu den Roten Klöstern eingeladen, wo sich der Überlieferung nach Paulus von Theben (geb. ca. 228 n. Chr.) und Antonius aus Ägypten (geb. ca. 251 n. Chr.) als erste Eremiten in der Kirchengeschichte dem Gebet widmeten und sich völlig von anderen Menschen zurückzogen. Sie zählen zu den Wüstenvätern, von denen eine kontemplative Bewegung ausging, die bis in die heutige Zeit in den Exerzitien der orthodoxen Kirche ausstrahlt. Der Besuch dieser Orte in unwirtlicher Umgebung mitten in der roten Wüste Ägyptens hat mich tief beeindruckt und mich dankbar werden lassen für die geistlichen Quellen und Traditionen, aus denen ich schöpfen kann und in die ich mich auch in gewisser Weise einreihen darf. Diese Wüstenväter haben aus dem Wunsch heraus, mit Gott ständig verbunden zu bleiben, ganz eigene Übungen für sich entwickelt, die der physiologischen Wirkungsweise einer fernöstlichen Atemmeditation in frappierender Weise ähnlich sind.

Nach diesem Besuch in der Wüste habe ich mich mehr mit den geistlichen Übungen beschäftigt, mich in die Praxis des Ruhegebetes nach Peter Dyckhoff eingelesen und selber mit einer einfachen Atemmeditation angefangen zu üben. Nach und nach begann ich die herkömmlichen Achtsamkeitsübungen, die ja ursprünglich aus der buddhistischen Tradition kommen, in einen christlichen kontemplativen Rahmen zu setzen sowie ein Training über 8 Wochen für ein Gruppensetting zu entwickeln.

Im Machtvakuum des politischen Übergangs im Oktober 2011 wagten sich in unserer Nähe auf der anderen Nilseite vor dem Maspero Gebäude (TV) koptische Christen auf die Straße, um für ihre Rechte zu demonstrieren. Das Militär stoppte die Versammlung gewaltsam, Hunderte wurden verletzt, es gab viele Tote zu beklagen. Die Berichterstattung und die Bilder der lokalen Medien empfand ich als unerträglich.

throw of the new ruler. Now the country sank into complete chaos. In the middle of the very hot summer of 2014, a curfew was imposed; in daytime temperatures of almost 50°, I felt imprisoned and was not allowed to go out of the house after sundown. Furthermore, besides the turbulences and gatherings of crowds, there were shootings in our immediate vicinity which I only just escaped. There were also real and latent threats from unpredictable bomb attacks on police stations after Friday prayers. Now, for the first time in my life, I myself reacted with panic attacks and sleeping disorders, and had immediate personal experience of how disturbing it can be to feel one is left completely helpless.

In this difficult time, the one thing I still had were my mindfulness exercises, which now served as a secure anchor for me personally throughout the most turbulent phases. Deep abdominal breathing, for example, which I connected in my imagination with the image that my creator was imparting life and security to me by breathing on me, was of great help to me here. As I could confirm from this experiment on myself, this exercise enabled me to fall asleep within a few minutes, since my pulse rate was reduced significantly and I could become calm. In the meantime, after my return to Berlin, I have continued to offer mindfulness training with contemplative elements. My clients confirm that, with the help of these meditation exercises, they have succeeded in mitigating stress-related symptoms such as sleep disorders, pain episodes and anxiety attacks. The visualisation exercise "sitting like a mountain", borrowed from MBSR (Mindfulness Based Stress Reduction) training, spoke strongly to some participants. I linked it to the spiritual truth that our rock in time is Jesus, on whom we can place our foundation. We are supported so securely by his strength and protection. We experience calmness through the fact that we have a place in Jesus and can simply BE – although the storms and the seasons outside are raging, HIS reliability remains unchanged. His characteristics are very close to us because we know that we are, so to speak, entirely enveloped by him.

Other exercises are concerned with deep abdominal breathing (directing awareness to breathing/allowing God's breath to breathe me), the

Meine KlientInnen, meist Mitarbeiter diverser Hilfsorganisationen, zunehmend am Rand ihrer emotionalen und körperlichen Kräfte arbeitend, profitierten nun von meinem neu entwickelten Handwerkszeug in ihrem Alltag, sodass sie sich in Belastungssituation selber gut herunterregulieren konnten.

Die politische Situation im Land verschlechterte sich zusehends, Mubarak saß im Gefängnis und das ägyptische Volk hatte einen neuen Präsidenten gewählt. Nach einem Jahr zogen jedoch die Massen wieder auf den Tahrir Platz, um das neue Oberhaupt zu stürzen. Nun versank das Land im totalen Chaos. Mitten im sehr heißen Sommer 2014 gab es Ausgangssperre, ich fühlte mich eingesperrt bei fast 50° Hitze tagsüber und durfte nicht vor die Tür nach Sonnenuntergang. Zudem kam es nun neben den Unruhen und Menschenansammlungen auch noch ganz in unserer Nähe zu Schießereien, denen ich nur knapp entkommen konnte. Außerdem gab es reale und latente Bedrohungen durch nicht vorhersehbare Bombenanschläge auf Polizeistationen nach den Freitagsgebeten. Nun reagierte ich das erste Mal in meinem Leben selber mit Panikattacken und Schlafstörungen und spürte am eigenen Leib, wie verstörend es sein kann, sich als hilflos ausgeliefert wahrzunehmen.

In dieser schwierigen Zeit blieben mir meine Achtsamkeitsübungen, die nun mir selbst durch die turbulentesten Phasen als ein sicherer Anker dienten. Hier war mir zum Beispiel die tiefe Bauchatmung aus dem Achtsamkeitstraining eine große Hilfe, die ich in meiner Vorstellung mit dem Bild verband, dass mein Schöpfer mir durch sein Anhauchen Leben und Geborgenheit vermittelt. Wie ich im Selbstversuch feststellte, wurde es mir durch diese Übung möglich, innerhalb weniger Minuten einzuschlafen, da sich meine Pulsfrequenz deutlich senkte und ich zur Ruhe kommen konnte.

Mittlerweile habe ich auch nach meiner Rückkehr nach Berlin einige Achtsamkeitstrainings mit kontemplativen Elementen angeboten. Meine Klienten bestätigten, dass sie mithilfe der Meditationsübungen stressbedingte Symptome, wie Schlafstörungen, Schmerzzustände und Angststörungen lindern konnten. Die aus dem MBSR (Mindfulness Based Stress Reduction) -Achtsamkeitstraining entlehnte Visua-



Body Scan (directing awareness to the body/practising letting go), with practising a loving inclination towards myself and towards others, with consciously mindful eating in daily life, with going on a meditative walk surrounded by nature which I enjoy with all my senses and, at the same time, actively train myself in gratitude towards God as the Creator. The aim in all these mindfulness exercises is to reduce distraction and to concentrate on the here-and-now.

Back in Berlin, I can now experiment even more with this new option and am already looking forward to seeing people who wish to share with me the experience of this effective training.”

From Helma Ziegler's impressive reports of experience into different cultural settings in Cairo and Berlin, it is clear that body-oriented mindfulness exercises can also find a place in the context of Christian coaching and therapy.

Christian and Buddhist approaches to mindfulness, however, are quite distinct. Christian mindfulness exercises do not have the Buddhist aim of breaking out of the repeated cycle of rebirths by an effort of the will. Christians trust in God's gracious personal care for us, which leads, after death, to fellowship with the Creator. They believe in Jesus Christ as a transcendent vis-à-vis and do not seek an inner fusion with reality. But techniques of mindfulness can help in arriving in the present moment in order to prepare oneself for reading or hearing the Bible and experiencing an encounter with God. The German theologian and psychologist Arved Willberg confirms with his book “Das ganze Ja zum Leben – Christliche Spiritualität der Achtsamkeit” [“The whole Yes to life – Christian spirituality of mindfulness”], published in 2019, the integration of body-oriented mindfulness exercises into Bible-based approaches to contemplation which Helma Ziegler has developed intuitively, but convincingly. Willberg is able to show that many treasures for the present can be found in the contemplative and meditative traditions of the Christian church as well. In particular, the interpretation of analogous effective principles in cognitive behavioural therapy and Christian spiritual counselling opens the reader's eyes for new perspectives in an attentive reading of the Gospels. Willberg seeks, for

lisierungsübung „Sitzen wie ein Berg“ hat einigen Teilnehmenden sehr zugesagt. Ich habe sie mit der geistlichen Wahrheit verbunden, dass Jesus unser Fels der Zeit ist, auf den wir uns gründen dürfen. Wir sind so sicher gestützt von seiner Festigkeit und seinem Schutz. Wir erleben dadurch Gelassenheit, dass wir in Jesus Raum haben und einfach SEIN dürfen - obwohl die Stürme und die Jahreszeiten im Außen toben, bleibt ER gleich verlässlich. Seine Eigenchaften sind uns ganz nah, weil wir uns von ihm gleichsam umhüllt wissen.

Andere Übungen beschäftigen sich mit der tiefen Bauchatmung (Achtsamkeit auf den Atem lenken/Atem Gottes mich atmen lassen), dem Body Scan (Achtsamkeit auf den Körper lenken/Loslassen üben), mit dem Einüben der liebevollen Zuneigung zu mir selbst und anderen, mit bewusstem achtsamen Essen im Alltag, mit meditativem Gehen auf einem Spaziergang in der Natur, den ich mit allen Sinnen genieße und mich dabei aktiv in Dankbarkeit gegenüber Gott als Schöpfer übe. In allen diesen Achtsamkeitsübungen geht es darum, Zerstreuung zu reduzieren und mich auf das Hier und Jetzt zu fokussieren.

Zurück in Berlin darf ich nun mit diesem neuen Angebot noch mehr experimentieren und freue mich jetzt schon auf Menschen, die die heilsame Wirkung des Trainings mit mir gemeinsam erfahren möchten.“

An Helma Zieglers beeindrucken Erfahrungsberichten aus zwei verschiedenen Kulturkreisen in Kairo und Berlin wird deutlich, dass körperbetonte Achtsamkeitsübungen auch einen Platz im christlichen Coaching- und Therapiekontext finden können.

Christliche und buddhistische Achtsamkeitsansätze unterscheiden sich allerdings deutlich. Christliche Achtsamkeitsübungen richten sich nicht darauf aus, durch Willensanstrengungen den Kreislauf der Wiedergeburten im Buddhismus zu durchbrechen. Christen vertrauen auf die gnadenvolle persönliche Zuwendung Gottes, die nach dem Tode in eine Gemeinschaft mit dem Schöpfer mündet. Sie glauben an Jesus Christus als transzendentes Gegenüber und streben keine innere Verschmelzung mit der Wirklichkeit an. Achtsamkeitstechniken können aber helfen, im Augenblick anzukommen,

example, to interpret some actions and words of Jesus as prototypes of mindful living, as, for example, in the comparison of the “Mary” and “Martha” modes (cf. Luke 10, 38 – 42).

Furthermore, a handbook for mindfulness-based cognitive counselling and therapy is currently in preparation, while the Institute for Counselling Training (ISA) in Ettlingen has since 2017 been offering a course for a certificate in Christian mindfulness training, taught by a team centred on Willberg. This initiative also represents the first Germanophone training opportunity for soundly based Christian mindfulness training in Christian spiritual guidance and counselling.

In the cognitive and affective neurosciences, meditation and mindfulness techniques have been the subject of research for several years. This confirms the subjective experiences of patients and clients regarding the positive effect on physical and mental health, especially in stress reduction (cf. Tang, Hölzl, & Posner, 2015).

In the ReSource project at the Max Planck Institute for cognitive and neuro-sciences in Leipzig and at the Charité Berlin, an extensive study has investigated the effects of mental mindfulness training on lay persons. After 11 months of regular meditation training, there was a clear improvement in stress reduction, emotional regulation and in perspective-taking (empathy) compared to their peers. Besides the subjective experience of positive effects, changes in hormone levels and brain plasticity were proved. The first empirical results have also been established in the search for areas of the brain, networks and molecular carrier processes which are responsible for these positive effects (cf. Tang, Hölzl, & Posner, 2015).

Dahl, Lutz, & Davidson (2015) have compared various studies on exercises in mindfulness and meditation. Here they have found out that the aims and methods exert great influence on which parts of the brain are activated. They distinguished three “families” of exercise forms which are based on different cognitive mechanisms and are therefore associated with different cortical areas.

1. Mindfulness-oriented exercises are of help in re-evaluating situations and enhance, by means of perspective-taking, the development of em-

um sich auf das Lesen oder Hören der Bibel vorzubereiten und eine Gottesbegegnung zu erleben.

Der deutsche Theologe und Psychologe Arved Willberg bestätigt mit seinem 2019 veröffentlichten Buch „Das ganze Ja zum Leben – Christliche Spiritualität der Achtsamkeit“ die von Helma Ziegler intuitiv, aber überzeugend entwickelte Integration von körperbentonnten Achtsamkeitsübungen in bibelbasierte Kontemplationsansätze. Willberg kann zeigen, dass auch in den kontemplativen und meditativen Traditionen der christlichen Kirche viele Schätze für die Gegenwart zu heben sind. Vor allem die Deutung analoger Wirkprinzipien in kognitiver Verhaltenstherapie und christlicher Seelsorge öffnet dem Leser die Augen für neue Perspektiven bei der aufmerksamen Lektüre der Evangelien. So versucht Willberg, einige Handlungen und Reden Jesu als Prototypen achtsamen Lebens zu deuten wie zum Beispiel im Vergleich des Maria- und Martha-Modus (vgl. Lukas 10, 38 – 42).

Auch ein Handbuch zur Achtsamkeitsbasierten Kognitiven Seelsorge und Therapie ist inzwischen in Vorbereitung. Am Institut für Seelsorgeausbildung (ISA) in Ettlingen wird zudem seit 2017 von einem Team um Willberg eine Ausbildung mit dem Zertifikat Christliche Achtsamkeitstrainerin/ Achtsamkeitstrainer angeboten. Mit dieser Initiative ist auch ein erstes Ausbildungsangebot für fundierte christliche Achtsamkeitsübungen in der christlichen Seelsorge und Beratung im deutschsprachigen Raum vorhanden.

In den kognitiven und affektiven Neurowissenschaften werden Meditations- und Achtsamkeitstechniken seit mehreren Jahren erforscht. Sie bestätigen die subjektiven Erfahrungen von Patienten und Klienten über die positive Wirkung auf die physische und mentale Gesundheit, vor allem auf die Stressreduktion (vergleiche Tang, Hölzl, & Posner, 2015).

Im ReSource-Projekt am Max-Planck-Institut für Kognitions- und Neurowissenschaften in Leipzig und der Charité Berlin wurden in einer groß angelegten Studie die Auswirkungen von mentalem Achtsamkeitstraining von Laien untersucht. Nach 11 Monaten regelmäßigem Meditationstraining gab es eine deutliche Ver-

pathy. They are thus primarily orientated on relationships and values.

2. Constructive exercises are of help in strengthening the sense of well-being in body and mind.

3. Deconstructive exercises are of help in examining and questioning oneself. They can be oriented on persons or objects.

Empirical studies of this kind can help therapists and counsellors in using mindfulness exercises in a more focused way with their clients and patients in order to relieve mental anguish and promote personal growth and blossoming (McMinn, 2017).

It is striking that over 95% of the studies mentioned in the article named above relate to Buddhist exercise techniques. Only the prayer of the heart (centring prayer) receives a brief mention. The time has now come for a similar amount of research work to go into the investigation of body-oriented mindfulness exercises coming from the Christian tradition. An excellent collection of exercises can be found in the Spiritual Disciplines Handbook by Calhoun (2015). One of the key questions for research could be this: What is the difference between body-oriented mindfulness exercises based on Buddhist fusion spirituality and Christian-inspired exercises based on a dialogue spirituality and oriented on God's word with the aim of deepening a personal relationship with God?

References

- Calhoun (2015). Spiritual Disciplines – Handbook – Practices that transform us. Downers Grove: InterVarsity Press.
- Dahl, Lutz, & Davidson (2015). Reconstructing and deconstructing the self: Cognitive mechanisms in meditation practice. *Trends in Cognitive Science* 19, 9, 515-523.
- Kabat-Zinn (2018). Meditation is not what you think – Mindfulness and why it is so important. London: Piatkus.
- McMinn (2017). The Science of Virtue. Why Positive Psychology matters to the church. Grand Rapids: Brazos-Press.
- Singer & Engert (2019). It matters what you practice: Differential training effects on subjective experience, behavior, brain and body in the ReSource Project. *Current Opinion in Psychology* 28, 151 – 158.
- Tang, Hölzl, & Posner (2015). The neuroscience of mindfulness meditation. *Nature Review Neuroscience* 16, 4, 213-225.
- Wielgosz, Goldberg, Kral, Dunne, & Richardson (2019).

besserung in der Stressreduktion, der Emotionsregulation und in der Perspektivübernahme (Empathie) gegenüber Mitmenschen. Neben den subjektiv erlebten positiven Auswirkungen konnten auch hormonelle und hirnplastische Veränderungen belegt werden.

Es gibt auch erste empirische Befunde bei der Suche nach den Hirnarealen, Netzwerken und den molekularen Trägerprozessen, die für diese positiven Effekte verantwortlich sind (vgl. Tang, Hölzl, & Posner, 2015).

Dahl, Lutz, & Davidson (2015) haben Studien zu unterschiedlichen Achtsamkeits- und Meditationsübungen verglichen. Sie haben dabei festgestellt, dass die Zielsetzungen und Methoden großen Einfluss darauf haben, welche Hirnregionen aktiviert werden. Sie unterscheiden drei „Familien“ von Übungspraktiken, die auf unterschiedlichen kognitiven Mechanismen beruhen und damit auch an unterschiedliche kortikale Areale gebunden sind.

1. Aufmerksamkeitsorientierte Übungen helfen bei der Neubewertung von Situationen und stärken durch Perspektivübernahme die Entwicklung von Empathie. Sie sind damit primär beziehungs- und werteorientiert.

2. Konstruktive Übungen helfen, dass eigene körperliche und psychische Wohlbefinden zu stärken.

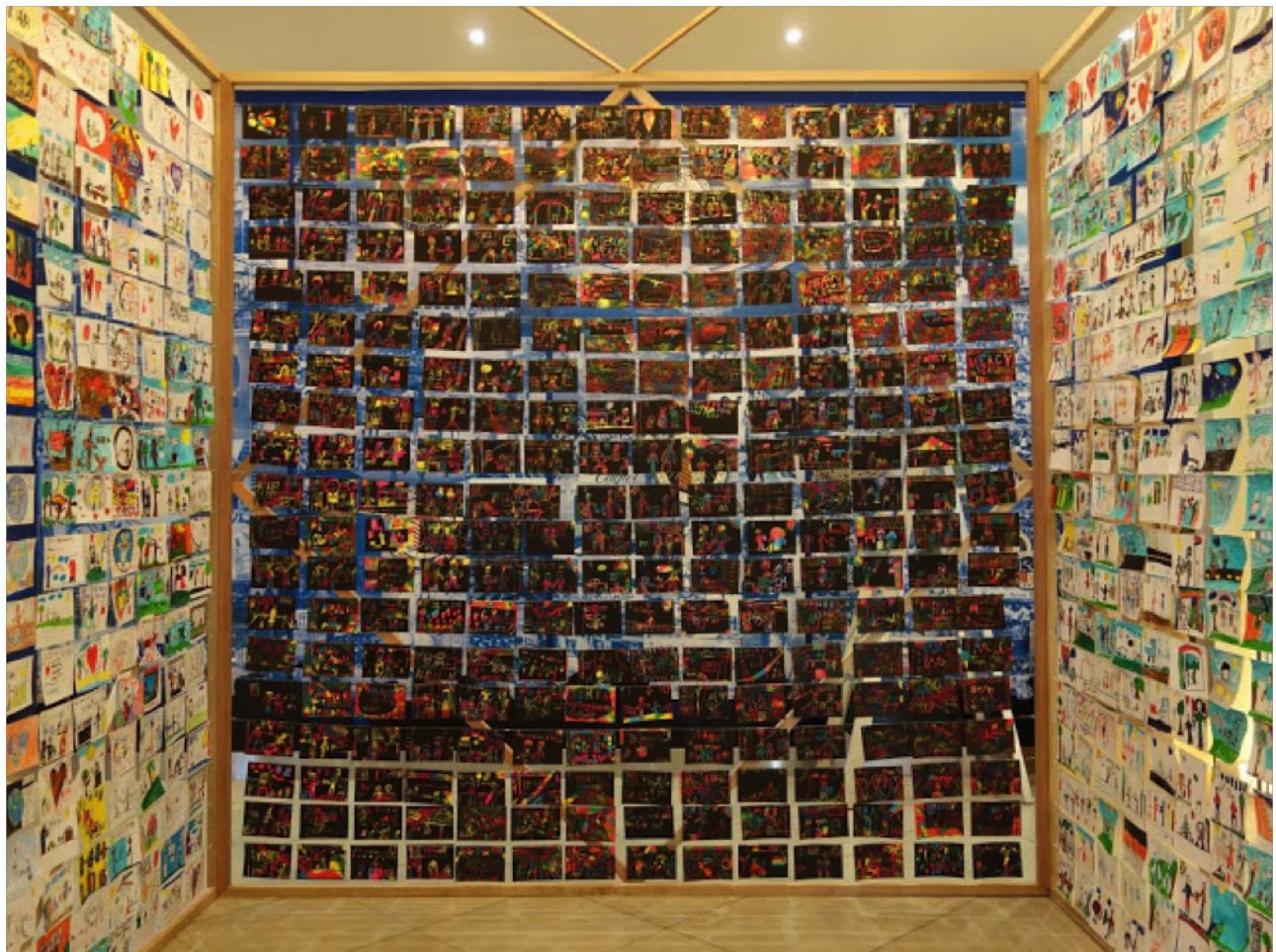
3. Dekonstruktive Übungen helfen die Selbstüberprüfung und Selbstbefragung zu stärken. Sie können personen- oder objektorientiert sein.

Empirische Studien dieser Art können Therapeuten und Beratern helfen, Achtsamkeitsübungen gezielter für ihre Klienten und Patienten einzusetzen, um psychische Leiden zu lindern und persönliches Wachstum und Aufblühen zu fördern (McMinn, 2017).

Es ist auffällig, dass über 95% der in dem oben genannten Artikel erwähnten Studien buddhistische Übungstechniken betreffen. Allein das Herzensgebet (centering prayer) wird kurz erwähnt. Es ist an der Zeit auch die Wirkung von körperorientierten Achtsamkeitsübungen, die aus der christlichen Tradition kommen, mit ähnlichem Forschungsaufwand zu untersuchen. Eine hervorragende Sammlung von Übungen ist in dem Handbuch geistlicher Übungsdisziplinen von Calhoun (2015) zu fin-

Mindfulness Meditation and Psychopathology. Annual Review of Clinical Psychology 15, 285-316.
Willberg (2019). Das ganze Ja zum Leben – Christliche Spiritualität der Achtsamkeit.
Kevelaer: Butzon & Bercker.

den. Eine der forschungsleitenden Fragen dabei könnte sein: Wie unterscheiden sich körperorientierte Achtsamkeitsübungen, die auf buddhistischer Verschmelzungsspiritualität beruhen von christlich inspirierten Übungen, die auf einer Dialogspiritualität beruhen und sich am Wort Gottes orientieren, um die persönliche Gottesbeziehung zu vertiefen.



Comment to “Body-oriented mindfulness exercises in a Christian context”

by Kelvin F. Mutter (Canada)

The academic and popular literature attests to what appears to be the universal acceptance of incorporating mindfulness practices within a variety of treatment settings and its function as a general tool for coping with life's stresses. In recent years various writers have proposed that a type of mindfulness may be experienced by individuals when Christian themes or practices are incorporated within mindfulness practice (Ford & Garzon, 2017; Fox, Gutierrez, Haas, & Durnford, 2016; Plante, 2017; Rosales & Tan, 2017).

In this brief article Helma Ziegler provides a moving autobiographical account of her experience working in Cairo with individuals who experienced cultural violence and in Berlin with people who live with the stresses of modern life. This first-person account is balanced by Johannes Haack's reflections on the theory and practice of body-oriented mindfulness practice. Similarly, Johannes Haack's differentiation between Christian and Buddhist approaches to mindfulness finds its balance in Helma Ziegler's brief description of the contribution of the desert fathers to both her thinking and her practice. Indeed, the use of these ancient Christian practices is one feature of this article that makes it significant.

As second significant feature of this article is the authors' depictions of Christian mindfulness and spiritual practice as an expression of a relational spirituality that reflects the heart's yearning to meet with and be at peace with God. This is observed in Helma Ziegler's description of re-purposing an MBSR technique by linking it to the Christian's relationship with Christ. Johannes Haack highlights the same point when he states, "techniques of mindfulness can help in arriving in the present moment in order to prepare oneself for reading or hearing the Bib-

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le and experiencing an encounter with God." This relational focus lifts mindfulness out of the realm of becoming at peace with oneself, or being a utilitarian action like taking medicine which if there is no relief for the physical and psychological symptoms only serves to devalue the practice.

While there is much I appreciated about this article, its focus on body-oriented mindfulness highlighted a question that I face in my clinical practice with individuals who live in physical pain following a physically traumatic accident. Specifically, I found myself wishing the authors had said more about the use of Christian body-oriented mindfulness with individuals for whom the disquiet of the soul is linked to living in physical pain. I acknowledge that this is a reflection of my context. Indeed, I very much appreciate the tone and balance of this article and look forward to learning more of the fruit of the research occurring in Germany that the authors refer to in this article.

References:

- Ford, K., & Garzon, F. (2017). Research note: A randomized investigation of evangelical Christian accommodative mindfulness. *Spirituality in Clinical Practice*, 4(2), 92–99.
- Fox, J., Gutierrez, D., Haas, J., & Durnford, S. (2016). Centering prayer's effects on psycho-spiritual outcomes: A pilot outcome study. *Mental Health, Religion & Culture*, 19(4), 379–392.
- Plante, T. G. (2017). The 4 Ds: Using Ignatian spirituality in secular psychotherapy and beyond. *Spirituality in Clinical Practice*, 4(1), 74–79.
- Rosales, A., & Tan, S.-Y. (2017). Mindfulness-based cognitive therapy (MBCT): Empirical evidence and clinical applications from a Christian perspective. *Journal of Psy-*



Heidi Pidcock (USA)

Somatic Psychotherapy and Divine Unity: A personal perspective

In the field of psychology, Somatic Psychology is premised on the knowledge that our selves are one unified whole. There is no actual separation between our minds, emotions and physical selves. This links to the deeply Christian concept that we are all one body in Christ which is evidenced in a host of natural phenomena. In this article I will share my personal journey and insights into wholistic wellbeing and the practice of body psychotherapy.

“Most people of today are ashamed to offer themselves to God, both soul and body. They feel that He has no use for their bodies, forgetting the infinite pains that He took to incarnate Himself within the veil of flesh so that He might from that time forth enter into all humanity.”¹

What led me to study this in the early 90’s In my early twenties I was sitting in Quaker Meeting for Worship having just moved to San Francisco a year after getting my undergraduate degree in Philosophy. A thought went through my head that perhaps it was time to develop a physical skill as my recent focus had been on my mental development. That led me to remember how much I had enjoyed massaging my older sister who suffered from polio as a child. Just then, a woman stood up and gave ministry about her work massaging priests and nuns. Speaking with her after Meeting led me eventually to enlist in massage school (and to a life-long friendship).

Towards the end of the massage school program, students were led through a deep process called unwinding. Each of my limbs and head were held by another who attuned to me and

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supported my body to move in whatever way they felt it wanted to. Before climbing onto the table, I had anticipated that this process would lead me to a place of laughter. Instead, I saw an image I didn’t totally understand; when my head turned towards the left, I saw a pus-filled sac connected to my left pelvis that made me sob deeply.

This experience surprised me and led me to understand experientially how my body held a record of my past that I hadn’t wanted to consciously admit to myself. It also motivated me to begin a life-long journey to deepen my understanding of the truth held in our tissues. My studies have led me to explore how our bodies, our voice, and movement allow for a much more complex and nuanced understanding of who we are and what we are feeling/sensing. The first stage in this new path was going through a three-year master’s program in Somatic Psychology. During my studies, I was challenged to revise many conscious and un-

¹ Sanford, Agnes. *The Healing Light*. New York: Ballantine Books 1972, p.82.

conscious assumptions. Having been raised in a conservative Christian family, I had thought of my body as simply a vessel for my spirit and not intrinsically intertwined with my soul. In this transformative learning process, I came to understand that the fundamental purpose of body psychotherapy or somatic psychotherapy is to support a client's whole being in their journey towards wellness, health and wholeness.

Background of Somatic Psychology

The field of body psychotherapy or somatic psychotherapy is mostly attributed to Wilhelm Reich (1897-1957), one of Freud's students who became very interested in pursuing the study of how energy gets trapped in our physical systems and the ensuing constrictions or armoring this can cause in our physical, mental and emotional health. Reich credited the influence of Salvador Ferenczi's description of the impact of childhood on muscle tone and posture in his development of bioenergetics.² His explorations and teachings influenced many others who further developed the field of somatic psychotherapy. Others point to how the very origin of psychology understood the connection between the emotions, the body and the mind.³ Freud's investigation into hysteria led him to initially explore the impact of early childhood trauma. He proposed that the memory of trauma which the patient fails to confront, because it will cause them too much mental anguish, can be "converted" into physical symptoms. "The term hysteria was dropped when the influence of a psychodynamic theory of mental ill health, with its concepts of unconscious mental forces affecting behaviour, fell out of favour in psychiatry. But while they turned to more measurable features and symptoms, the condition remains in what is now called "conversions disorder".⁴

In recent years the divide, emphasized by Descartes between the mind, body and spirit that

has been prevalent in scientific thought, is now beginning to lessen. Thanks to breakthroughs in neurobiology we better understand how deeply our thoughts, feelings, and sensations are intertwined, and how much they impact the structure and functioning of our brains. "How many mental health problems, from drug addiction to self-injurious behavior, start as attempts to cope with the unbearable physical pain of our emotions? If Darwin was right, the solution requires finding ways to help people alter the inner sensory landscape of their bodies. Until recently, this bidirectional communication between body and mind was largely ignored by Western science, even as it had long been central to traditional healing practices in many other parts of the world, notably in India and China."⁵

Antonio Damasio has developed a somatic marker hypothesis that demonstrates the interconnection between our limbic system and our prefrontal cortex. His work is based on "experiments that seem to show that the inability to experience emotions results in a severe impairment of rational decision-making. In an experiment conducted by Bechara et al. (1997), healthy controls and patients with emotional deficits had to perform a gambling task which required a rational decision for the most advantageous strategy in order to gain as much money as possible. The controls started with an emotional reaction, then they adopted the advantageous strategy before they were finally able to tell what the advantageous strategy was, a few trials later. Patients, by contrast, showed no emotional reaction and continued to use the disadvantageous strategy throughout the experiment, although they also realized what the advantageous strategy was."⁶

This knowledge of our inherent unified being, which the scientific community is validating in recent years, has been the foundation of the field of somatic psychotherapy and practices for

2 Mead, Veronique. "An Introduction to the history, background, and theoretical perspectives of Somatic Psychology." p. 2 Accessed June 20, 2019 www.veroniquemead.com

3 Ibid

4 Nicholson, C. "Why Freud was right about hysteria" The Conversation November 16, 2017 Accessed June 21, 2019. <https://theconversation.com/>

5 Van der Kolk, B. A. *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. New York: Viking, 2014.

6 Pauen, M. "Emotion, Decision, and Mental Models" *Advances in Psychology*. Volume 138, 2006, p. 173-188. Accessed June 20, 2019.

nearly a century, and before that, all religious and non-Western healing practices.

"The simplest and most direct of all prayer-projects is the healing of the body. The body is indeed a laboratory exquisitely adapted to the working out of the power of God."⁷

Somatic Therapy and Somatic Techniques

In somatic psychotherapy the transformation is often led by a 'felt-sense' in both the client and the therapist. The client may report pain that is unexplained by medical tests or symptoms that confound medical doctors. Exploring the client's unprocessed past starts with questions such as 'where are you feeling that in your body?'. Helping a client understand the connection between their emotions, thoughts and sensations can more effectively lead to the awareness of what needs attention and eventual release. Essential to this process is exploring the breath, the trauma history and wider family history, and like my own experience above, what memories are held in the body that may not be readily available to the mind.

Sue was a middle-aged single woman who was a successful career woman. She would often yawn repeatedly when I invited her to connect to what was happening in her body. As treatment progressed, she stated one day how she felt suffocated by an early experience. Her earliest bodily pattern was based on the thought that she lacked oxygen. When she was able to relax her guard, that physical pattern reemerged. Processing the memory that led her to feel suffocated, led to a dramatic end to her repeated yawning in session.

The somatic therapist also tunes into her body to help the client's process. In many sessions, I will feel my breath becomes shallow or that my heart feels heavy just before a client engages with emotionally difficult material. At other times, I may find myself very suddenly sleepy. After nearly 25 years as a therapist, I understand that this lethargy in my body is most often in response to a client's strong disconnection from

their emotions. By facilitating them to a more emotionally connected place, the sleepiness disappears and I find myself alert and attentive again. Using my own body to mirror my client's unconscious process is linked to the notion of syncing which I will describe later in this article.

As I've studied different modalities such as Voice Movement Therapy and Core Energetics, it seemed difficult to find a comprehensive list of somatic therapies and techniques. To better understand the range of what belongs in the field of Somatics, I have created a table of those somatic psychotherapies that require a clinical license to practice, and the more prevalent somatic techniques which are practiced by non-clinicians. (See at the end)

Breath

Almost all therapies and techniques have the commonality of attending to the breath. This is one of the fundamental starting points in exploring how one is embodied at any given time. Focusing on our breath helps us to realize Mary Whitehouse's statement that 'the body doesn't lie', though our minds can unconsciously engage in any number of cognitive biases. (For an interesting list click [here](#).)

Breath is the bridge between our emotions, our bodies and our spirits. It is essential to life and health. Disturbances in our breath point to distress in our systems. Recently I underwent surgery that initially caused me incredible pain. I suddenly thought, 'Now I understand why dogs pant when they are in pain. This is hard work!' Bringing attention to my breath helped ground me in the present moment. This created enough of a shift away from the fear-based constriction in my tissues, so I could experience a slight lessening of pain.

Working with clients I will often notice a release is starting to happen when I observe a sigh or an easing of their breath. Our capacity to rest is deeply linked to our breath. One of the simplest and most common ways to fall asleep is using a breathing technique such as breathing in, holding one's breath, and releasing one's breath, each for a count of four. I was recently reminded that this emphasis on breath has deep spiritual precedence. Exodus 31:17 states "For in six

⁷ Sanford, Agnes. *The Healing Light*. New York: Ballantine Books 1972, p.9.



days Yahweh made heaven and earth, but on the seventh day he rested and drew breath." (New Jerusalem Bible)

Trauma

Many of the developments in the understanding of how unified the body and mind are, comes out of the recent developments in neuroscience addressing the consequences of trauma. According to Bessel van der Kolk, "Neuroscience research shows that the only way we can change the way we feel is by becoming aware of our inner experience and learning to befriend what is going on inside ourselves."

Indeed, it is important to understand that as we focus on the impact of developmental, chronic and single-incident trauma, it is also true that increasing evidence points to our capacity to recover from emotional and psychic wounds. Daniel Amen and others have shown the resulting neurological changes that result after undergoing trauma therapy such as EMDR. "Analyses found significant functional differences in brain activity from pre- to post-EMDR imaging. EMDR and the procedures involved with this treatment had both a positive clinical effect and a possible role in changing brain function."

The plasticity of our brains corresponds to a spiritual promise of renewal when we live in Christ and develop more and more the capacity to embody hope. Isaiah 40:31 states, "For those who

hope in the Lord will renew their strength. They will soar on wings like eagles, they will run and not grow weary, they will walk and not be faint." (NIV)

One of those who have contributed significantly to this field is Vincent Felitti with research on the impact of adverse childhood events. Felitti's first study was conducted in the Kaiser Medical Care system in the United States, and asked 17,000 participants 10 questions about early experiences of child abuse – emotional, physical and sexual; emotional and physical neglect; and household challenges which included growing up in a household where there was substance abuse, mental illness, domestic violence, parental separation/divorce or a household member being incarcerated. The study showed a graded dose-response relationship between early adverse experiences and negative health and well-being. The study has been repeated with very similar results in a range of populations within the United States.

Experiences of adversity in childhood become 'embodied', and if untreated can cause many seemingly unrelated problems, ranging from chronic negative behavior patterns to serious challenges related to physical and mental health. The following figure summarizes the far-reaching, long-term consequences of early life adversity.



Epigenetics

The results of Felitti's study which describes the impact of secondary traumatization, also leads to the recent developments of epigenetics which delineate the direct link between traumatic events in the lives of our progenitors, and the enormous influence this can continue to have on the patterns in our choices and overall functioning.

Through recent innovations in the field of genetics and neurobiology, we are beginning to better understand the long-term impact of pain, terror and trauma not only on our psyches and our bodies, but also on those of our children and their children. "The term "epigenetics" refers to a set of potentially heritable changes in the genome that can be induced by environmental events. These changes affect the function of genomic DNA, its associated histone proteins, and non-coding RNAs, collectively referred to as chromatin, but do not involve an alteration of DNA sequence."¹

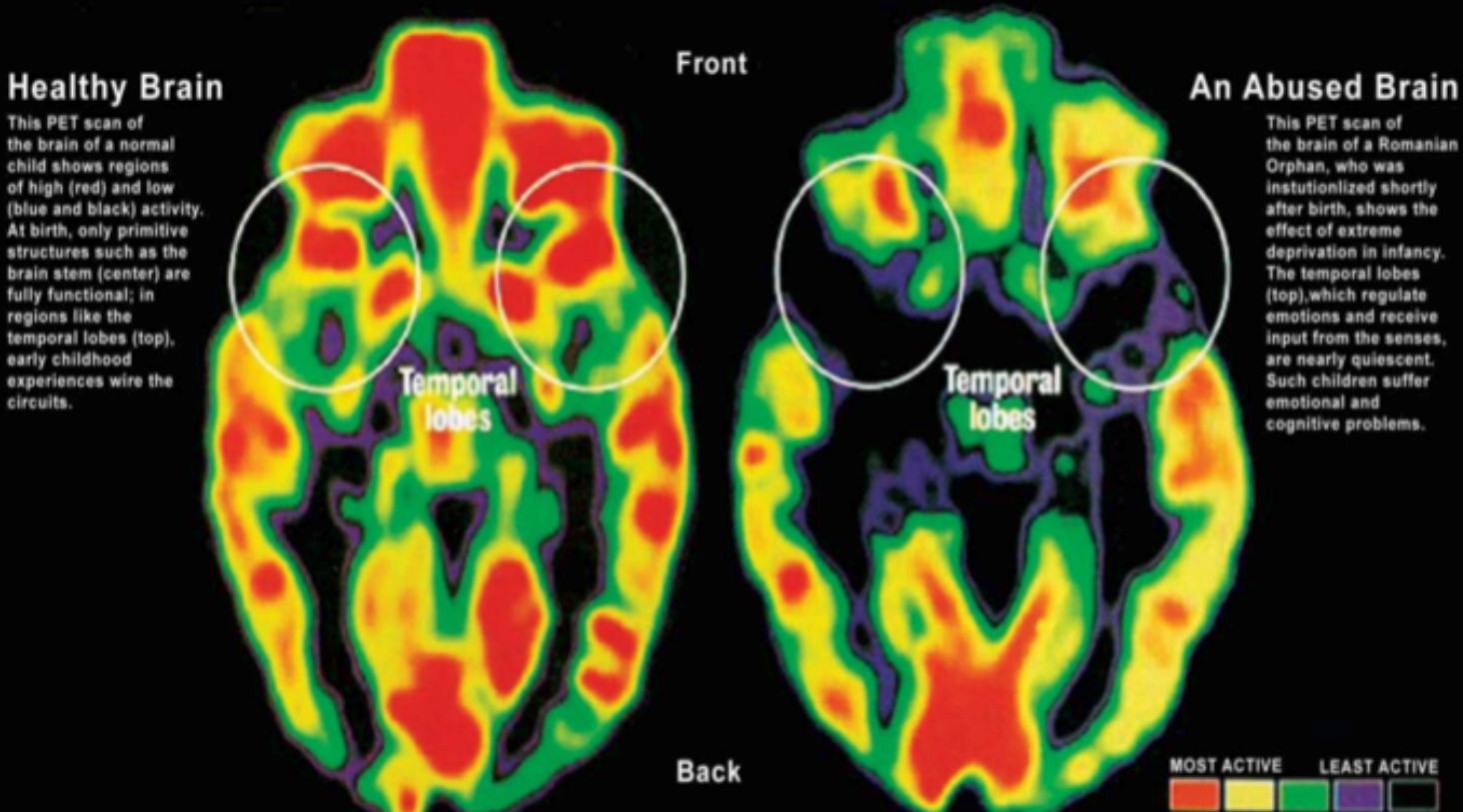
Brain areas implicated in the stress response

include the amygdala, hippocampus, and pre-frontal cortex. Traumatic stress can be associated with lasting changes in these brain areas such as fewer number of neural networks in medial pre-frontal cortex and the reduction in size of the amygdala and hippocampus. "We are coming to grasp that psychological trauma physically impacts the brain immediately following injury, and over time."²

It is not exactly clear how this happens, but the consequences of these neuroanatomical changes can wreak havoc in the functioning, behavior and mood of those affected by Post Traumatic Stress Disorder (PTSD). Traumatic stress is associated with increased cortisol and norepinephrine responses to subsequent stressors. "If you are traumatized and have PTSD symptoms, you may experience chronic stress, vigilance, fear, and irritation. You may also have a hard time feeling safe, calming down, or sleeping. These symptoms are all the result of a hyperactive amygdala."(Ibid)

1 Yehuda, R., and Lehrner, A. "Intergenerational transmission of trauma effects: putative role of epigenetic mechanisms." *World Psychiatry* 17:3 p.246.07 September 2018. Accessed June 17, 2019 <https://doi.org/10.1002/wps.20568>

2 Grant, H.B. "New Study Shows Brain Change After Psychological Trauma." *Psychology Today* Posted Dec 05, 2018. Accessed June 18, 2019. <https://www.psychologytoday.com/us/blog/experimentations/201812/new-study-shows-brain-change-after-psychological-trauma>



We are now understanding that these negative consequences can be transmitted to subsequent generations. "Meaney et al also made clear the possibility that epigenetic effects could occur at various stages throughout life, potentially influencing risk and vulnerability for chronic responses to trauma, such as PTSD, across the lifespan."³

Cellular Memory

Dr Brian Dias has said, „There is absolutely no doubt that what happens to the sperm and egg will affect subsequent generations.“⁴

Prof Marcus Pembrey, from University College London, said that the research done on mice inheriting a fear of a scent they had not been exposed to previously, showed evidence of how memory could be passed between generations and were „highly relevant to phobias, anxiety and post-traumatic stress disorders. It is high time public health researchers took human transgenerational responses seriously. I suspect we will not understand the rise in neuropsychiatric disorders or obesity, diabetes and metabolic disruptions generally without taking a multi-generational approach.“ (Ibid)

In somatic psychology attending to the whole being allows for experiences that aren't necessarily available at the conscious level. Some experience a level of vulnerability that doesn't seem to match the personal history. However, the field of epigenetics helps point to the importance of taking into account family history and in-utero experiences.

In my practice I have noticed a pattern of clients feeling more vulnerable on the anniversary of certain traumatic episodes, even after these have been processed. Peter's mother had been in a horrific car accident when she was pregnant with him. With EMDR, we had worked on resolving the symptoms which led to his sympathetic nervous system being chronically over-activated. As the subsequent anniversary of the time his Mother was in the accident approached, Peter noticed himself feeling more emotional – sad, scared and tearful. He was confused about what was happening as nothing in his daily life had changed dramatically. When I suggested that his body might be remembering the anniversary of the accident, he had a 'felt-sense' of relief. He was then able to do another layer of work, attending to his need to trust that it was safe to be in the world.

As Christians, understanding the impact the history and experiences of our ancestors has on us, should not come as a surprise. "Just as each of us has various parts in one body, and the parts do not have all the same function: in the same way, all of us, though there are so many of us, make up one body in Christ, and as different parts we are all joined to one another." Romans 12:4-5 The truth of our ultimate interdependence, the notion that we are unified beyond our rational comprehension, is reflected not only in our life in Christ but in science and nature.

Interdependence

The notion of quantum entanglement within the field of physics points to research that was done on molecules and tissues that were once connected and then separated. Particles can become entangled when they interact with each other or when they share a common source. Actions performed on one affects the other, even when separated by great distances. "Measuring a property of one entangled particle can tell you what measuring the other particle will reveal. No matter how far away the other particle is." The latest experiments in entanglement point to the fact that it can't be understood "in spacetime terms because entanglement precedes spacetime. You need entanglement to have spacetime — it is somehow more fundamental

³ Meaney MJ, Aitken DH, Bodnoff SR et al. "The effects of postnatal handling on the development of the glucocorticoid receptor systems and stress recovery in the rat." *Prog Neuropsychopharmacol Biol Psychiatry* 1985;9: p.731-4.
⁴ Gallagher, J. "Memories Pass Between Generations". BBC News. December 1, 2013. Accessed June 29, 2019. <https://www.bbc.com/news/health-25156510>

than spacetime.”⁵ As a Christian, it is fairly easy to understand that it is not only our individual selves, but all of creation, the entire known world, is simultaneously a manifestation of God and continuously arising from God, where we ‘live and breathe and have our being.’

Syncing

Another example of how interconnected we are is found in syncing. The natural law of coupled oscillators holds that when two or more rhythms meet, they will become coordinated—a phenomenon seen across the natural world, from fireflies matching their flashes, to women’s menstrual periods harmonizing when they live together, to the scattered clapping in a crowd spontaneously falling into the same pattern.

In somatic psychotherapy this natural syncing or resonance is used to facilitate a client’s deepening awareness and healing. Earlier I mentioned how my body attunes to my client’s through my own physical sensations. I liken this to when a still tuning fork begins to vibrate (if it has the same natural frequency) next to a second tuning fork that is struck.

This syncing is of course reciprocal and can be used to support clients. For instance, if a client is in a state of despair or hopelessness, as a therapist I will hold the place of hope or possibility for their healing until the client can begin to connect to that place inside themselves. As Christians, this notion is one that is naturally associated with prayer. As a Quaker, when I pray, I focus on ‘holding someone in the Light’. In doing so, I can imagine that the resonance of that which participates in God within them, is being amplified by the resonance of the light from which we both arise.

“God is light and joy and peace, and [when we are ill] we are ...in darkness and sorrow and discomfort.” “Let us not be ashamed to accept healing from another when we cannot find it by our own efforts.”⁶

5 Siegfried, T. “Quantum spookiness survives its toughest tests: Entanglement’s weirdness leads to new view on emergence of spacetime” Science News. January 27, 2016. Accessed June 14, 2019. <https://www.sciencenews.org/blog/context/quantum-spookeness-survives-its-toughest-tests>

6 Sanford, Agnes. *The Healing Light*. New York: Ballantine Books 1972, p.74

Embodied Love

Somatic Psychotherapy is based on principles arising from wisdom that was deeply understood by ancient systems of healing and by mystics: namely, we are one integrated and interrelated body. In the recent past, our scientific advances have been able to validate this long-held truth.

One of Jesus’ principle injunctions, according to his disciples, was telling us to ‘Fear Not.’ In my understanding, this deeply aligns to my work as a somatic psychotherapist. Supporting clients’ transformation of patterns rooted in fear allows a space where hope can grow. This spaciousness means that clients can literally breathe more easily, allowing for more life. As they experience healing, clients will often use language that points to their increased capacity to embody love. Phrases such as, ‘I feel more clarity’ My chest feels more open,’ ‘My body feels lighter, less burdened’ all indicate how this journey to an embodied place of wholeness and health is holy work. And one I believe, that contributes to bringing God’s realm here on earth.

My journey in somatic psychotherapy has resulted in my body being a much more comfortable place in middle age than when I was in my twenties. Understanding that I am one unified being, not an aggregated sum of body, mind, and spirit, leads me to embrace all of myself and all of my client’s self. As Agnes Sanford emphasized, God took great pains to become incarnate. Incorporating the body is essential in the holy work of releasing the hold of fear, learning to embody and enact love, and saying yes to God’s promise found in 2 Corinthians 5:17. “This means that anyone who belongs to Christ has become a new person. The old life is gone; a new life has begun!” (New Living Translation)

References

- Kolassa, I.T., & Elbert, T. “Structural and functional neuroplasticity in relation to traumatic stress.” Current Directions in Psychological Science, 2007:16, p. 321-325.
Wingenfeld K, Wolf, O.T. “Stress, memory, and the Hippocampus” In: *The Hippocampus in Clinical Neuroscience*. S. Karger AG; 2014: p. 109–120.
Yehuda R, Bierer, L.M. “The relevance of epigenetics to PTSD: implications for the DSM-V.” Journal Trauma Stress 2009; 22: p.427-34.

Table 1

Somatic Psychotherapy	Founder(s)	Website	Accredited Training program	Clinical degree required
Bioenergetics	Wilhelm Reich and Alexander Lowen	http://www.bioenergetic-therapy.com	Y	Y
Biodynamic Psychotherapy	Gerda Boyesen	https://biodynamic.org/	Y	Y
Biosynthesis	David Boadella	http://www.biosynthesis-institute.com/	Y	Y
Bodymind Integration	Jack Painter	https://bodymindintegration.com/ https://postural-integration.net	Y	Y
Bodymind Psychotherapy	Susan Aposhyan	www.bodymindpsychotherapy.com	Y	Y
Eye Movement Desensitization Reprocessing (EMDR)	Francine Shapiro	www.emdr.com	Y	Y
Formative Psychology	Stanley Keleman	http://centerpress.com/ http://www.cip-zfw.com	Y	Y
Gestalt Therapy	Fritz and Laura Perls	http://www.gestalttherapy.org/	Y	Y
Hakomi	Ron Kurtz	https://hakomiinstitute.com/	Y	N
Integrative Body Psychotherapy	Jack Lee Rosenberg and Marjorie Rand	www.ibponline.org	Y	Y
Primal Therapy	Arthur Janov	http://www.primaltherapy.com	Y	N
Process Oriented Psychology	Arnold and Amy Mindell	http://www.aamindell.net http://www.iapop.com http://www.processwork.edu	Y	Y?
Sensorimotor Psychotherapy	Pat Ogden	www.sensorimotorpsychotherapy.org	Y	Y
Somatic Experiencing	Peter Levine	https://traumahealing.org/	Y	Y

Comment to “Somatic Psychotherapy and Divine Unity: A personal perspective”

by Gwen White (USA)

Pidcock gives us a compelling personal account of her journey as a somatic psychotherapist and an extensive and comprehensive literature review of the field. Her chart compiling various models and forms of somatic technique and theory alone is worth the price of admission! She has woven into her argument insights from Christian mystic, Agnes Sanford, and added apt references to the Old and New Testaments. Her main argument that research in neuroscience and trauma has validated the reality of “our inherent unified being,” that is that our bodies, minds and spirits are one and must be treated accordingly, is well supported. I applaud her turn away from Descartes and the Greek separation between mind and spirit. This false dichotomy has been thoroughly debunked in the literature related to our treatment of clients in distress, particularly those who have experienced trauma.

The author notes a series of connections between science, nature and a Christian understanding of life and relationships. She explores links between Epigenetics, cellular memory and the interdependence of the Body of Christ pictured in Romans 12 as a singular human body with systems functioning as a unified organism. Central to Pidcock’s Christian integration of somatic psychotherapy is her focus on Jesus’ oft repeated command in the New Testament to “fear not.” She recommends that clinicians pay close attention to what is happening in their own bodies as well as asking clients to explore where they might be feeling emotions in their bodies. This connection between counter-transference work and unconscious and unprocessed emotions in the therapy room seems particularly important to me and I echo her image of this attention and invitation offered to clients as

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Marriage and Family therapy. She is a licensed psychologist in Pennsylvania and founded Circle Counseling in 1997, a counseling center in Philadelphia offering professional mental health services grounded in faith. Having served at the Hospital of the University of Pennsylvania in the neuropsychology wing of rehabilitative medicine, her research interests include: the application of neuroscience to helping relationships, counselor training and supervision, spirituality and counseling practice, mentoring relationships, compassion fatigue, trauma and religious experience. She and her husband, Rod, live in West Philadelphia and enjoy their four adult sons and their growing families with nine grandchildren nearby to play with.



holy work aimed to assist clients in the release of fear. This seems fundamental to our work as therapists or as Pidcock comments, our task of offering “embodied love” to those who come to us seeking help.



Susan Gitau (Kenya)

Comment on the eJournal Christian Psychology Around The World

I am Susan Wambui Gitau (PhD), Counseling Psychologist working as a consultant therapist in Nairobi, Kenya and a lecturer at Africa Nazarene University, Kenya. I am also a founding trustee of Susan Gitau Counseling Foundation that supports vulnerable individuals, families and communities.



MY CHRISTIAN IDENTITY

Writing about my Christian identity has a lot to do with who I am as an African Christian, African Psychologist, African Christian Lecturer and a Practicing African Therapist too. At the university, I teach Multicultural Counseling, Trauma Counseling and Marriage and Family Therapist. During all my classes, I integrate Christianity into my lectures and in retrospect; I have come to realize it is about my identity as Christian that takes a bigger space in the integration than the expert in the subject.

Passionately, I have found my Christian identity make more sense in my trauma work marriage and family counseling where I have tested many cognitive and marriage and family theories but none of them compares to the mindful self – compassion practice. Compassion of Christ remains the biggest challenge to model for many Christians today. I have found myself relating to many incidences in my life that lack any explanation and all that is left is self - compassion. Christ offered to die for us sinners and in my walk a Christian. I have offered myself to suffer by speaking up in cases of moral issues and advocacy for the rights of vulnerable groups. At times, am so exhausted to do anything but when I recall the compassion that Jesus Christ treated the world with, I press on to lead a Christian purpose driven life.

PRACTICAL CONSEQUENCES

My African identity has a big impact on my Christian identity because growing up as an African, there is so much to relate with Christianity. When a child is born in an African community, the names given have meaning and this also applies to the Christian names. Wambui is my maiden name which means, a leader, Gitau means open and authentic. Susan from Susanna is a Christian name that was given to me during the baptism; it means one with moral courage. Compassion goes beyond judging others, advising others, obeying the law but giving of ourselves; responding to the needs of my clients more like Christ did and God does. However, while dealing with my clients in trauma, marriage and family counseling, there is a big need to reconcile my cultural identity and Christian identity. I have found myself trying to live like Christ desires for all his followers and this has made me feel like part of the big church of Christ without discrimination (Romans 11:11). Just like the Jews believed in the forefathers wisdom, Africans are not any different. I have had to read more about different cultures to seek and understand meaning form their cultural roots.

As a Christian lecturer, am mostly encouraged by great biblical teachers like Ezra (Ezra 7:6-10) who was well versed with the law of the Lord and he not only preached the gospel with power and convention but also lived the law. I

have found myself living the meaning of my names jointly. I have found myself authentic, real, truthful and open to myself and others. In terms of my Christian identity, am more than ready to stand for the truth and advocate for the rights of the marginalized (Mark 2:3).

This journal “Christian Psychology Around the World” is such a powerful unifying read that will see all Christian psychologists come together and make a difference globally as one big family of Christ; led not by knowledge acquired

through rigorous academic and practice journey but by the inspiration of the holy spirit and the compassion ministry started by Jesus Christ himself. I am humbled and blessed to contribute to The EMCAPP journal and to continue contributing to this journal as I become part of the team of global witnesses as written in John 17: 21-23. A united Christian family not defined by race, geographical boundaries, ethnic background, social economic status among other discriminative factors but by salvation of Jesus Christ.

Can Neuropsychology Find a Fruitful Place in Christian Psychology with contributions by Johannes Haack (Germany), Jason Kanz (USA), Trevor Griffiths (Great Britain) from eJournal 4, 2013

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Tumaini Counselling Centres in Nairobi & Kampala**



Since 1991 Africa Inland Mission (AIM) and Wycliffe Bible Translators International (WBTI) have worked cooperatively to provide counselling and mental health support services for missionaries at Tumaini Counselling Centre in Nairobi, Kenya. ‘Tumaini’ is a Swahili word meaning ‘hope’. In 2002 we moved into a beautiful facility designed both for our confidential counselling and mental health ministry, as well as our more public preventative care work; we even have beautiful and restful gardens for quiet reflection.

Today Tumaini is a world-leading centre specializing in missionary mental health care. While we serve the members of AIM and WBTI, we also support missionaries and their families from over 160 like-minded agencies throughout Africa, seeing 350 – 400 people each year. Much of this work is face-to-face consultations at Tumaini, but we also offer distance services, travel to mission conferences around Africa, run seminars and offer a variety of other resources.

A new smaller centre based in Kampala, Uganda, opened in March 2016, to better serve missionaries working in Central Africa.

All our mental health clinicians are experienced and professionally qualified in their home countries. In addition, they are missionaries themselves, co-workers in the Great Commission, working to strengthen God’s servants as they follow His call. The current team includes psychiatrists and psychologists, psychotherapists, marriage and family therapists, clinical social workers and counsellors coming from the US, UK, Germany, Sweden and South Korea.

Africa Inland Mission is urgently seeking:

- we need additional experienced adult or child psychiatrists, and psychologists and therapists

Come to work with us – for a year or for much longer – and help us respond better to those who need our services.

For more information and applications:

To work at Tumaini is a calling, not just a job. You need to apply to AIM as a short-term or long-term missionary (which includes raising your own funding for your work here), and putting in a professional application to Tumaini. If you are interested in finding out more, please contact Mark Phippen, Clinical Team Leader, at the email address below.

Clinical Team Leader, Tumaini Counselling Centres: linicalteamleader.ac@aimint.org

Useful links:

Tumaini Counselling Centre website: <http://tumainicounselling.net>

Articles & videos about Tumaini: <http://tumainicounselling.net/about-us/videos/>

Africa Inland Mission website: <http://www.aimint.org>

2019 EMCAPP-Conference Tampere (Finland)

by Saara Kinnunen

The first ever EMCAPP-Conference was held in March 22-24 in Tampere, Finland. The difference between this recent conference and EMCAPP-Symposiums lies in the purpose of the participants: This conference brought together Christian therapists, psychologists, doctors and others who function in helping professions. The annual symposiums on the other hand focus more on academic experts sharing experiences and research from the field of Christian Psychology.

The theme of the EMCAPP-Conference was The Meaning of Relationship in Christian Anthropology, Psychology and Psychotherapy and Counseling. We had over hundred participants, which also included attendees from Estonia and Italy.

Vibeke Möller, Dr. of Medicine and a Trau-

ma Therapist from Denmark, taught the opening session in the conference. Her topic was Blessing as Empowerment in Counseling and Psychotherapy. Blessing another can mean invoking Gods favor, approval – good wishes – upon a person. Our blessing response toward others is that of a mental attitude of appreciation. The Hebrew word for blessing means bending your knees. A camel had to bend its knees so that its master could mount it (Gen.24:11). Bending before someone is a symbolic picture of valuing that person. Uffe Schjødt's research from Denmark suggests that when we pray to God, socio-cognitive and affective centers we use for interaction with others are activated as if we were speaking to another person. When someone you trust prays for you, the centers in the brain are activated and the critical sense in the prefrontal lobe is inhibited. We find many references in the Old (640 times) and New testament to blessings. We have been called to bless people, because we are the royal priesthood (1. Peter 2: 9, 3:9).

In her lecture on Relationship and Attachment in Psychotherapy Dr. Möller challenged the participants to examine their attachment styles and



its effect on the therapeutic relationships. She also encouraged observation on the client's style of relating and its meaning on the therapeutic relationship. "The therapist's role is analogous to that of a mother who provides her child with a secure base from which to explore the world" (John Bowlby). Dr. Möller described four maxims or conditions for therapeutic change. Most attachment-oriented therapists would probably agree on the following statements:

- (1) Insecure, ambivalent, avoidant, or disorganized early attachment experiences are real events which can substantially and destructively shape a client's emotional and relational development (the client's adult problems don't originate in childhood-based fantasies).
- (2) The attachment pattern learned in early childhood experiences will play out in psychotherapy.
- (3) The right brain/limbic (unconscious, emotional, intuitive) interaction of the psychotherapist and client is more important than cognitive or behavioral suggestions from the therapist; the psychotherapist's emotionally charged verbal and nonverbal, psychobiological attunement to the client and to his/her own internal triggers is critical to effective therapy.
- (4) Reparative enactments of early attachment experiences, co-constructed by therapist and client, are fundamental to healing

Harri Koskela, Th.D/ Psy.D candidate from Finland, introduced his research study entitled Connection between Religiosity and Mental Wellbeing in a Finnish Sample. The research results appear similar to research conducted in other countries, according to the Handbook of Religion and Health. The findings indicate for example the following: Religious persons are less likely to get divorced and they are more likely to have stable, intact families. Religiously committed persons use less alcohol and drugs and have a better physical health, which increases mental health. Religiosity also increases the experiences of hope, meaning and purpose in life. Religious activities, such as participation in worship services, various prayer and Bible study groups and volunteering increase wellness at all age groups. Religious communities offer social support. Most research studies have found religious persons to have a life-governing

internal locus of control. Many religious beliefs enhance hopefulness, optimism and positive thinking.

As Dr. Koskela spoke on Forgiveness and Health, he remarked how people, who forgive others, have a better physical and mental health. They also practice less rumination and hence present with less depression, anxiety, anger, hate and resentment. In addition, they have better relationships with partners, family members, workmates/colleagues and within societies as well as an overall better spiritual well-being (Everett Worthington).

Joachim Kristahn, a Psychologist and Psychotherapist from Germany spoke on a topic of, What the Therapist Should Know If They Have a Client with ADHD? The children with ADHD have a significantly higher risk to be diagnosed with a social disorder in their youth as well as be diagnosed with an antisocial personality disorder in adulthood. While people come to counseling and therapy due to multiple life difficulties, an undetected ADHD may play an important part. Such persons have been misunderstood by others, and they have experienced criticism and resistance from teachers, parents and colleagues. The challenge for the therapist is to see the client's inner pain. Together, they can bring that pain to Jesus. Another challenge for the therapist is to see and appreciate the client's strengths. The goal of therapy is to renew the client's self-image and strengthen their self-confidence and trust in God. The therapeutic relationship, strengthening and upbuilding words, encouragement, looking the person in the eye as well as providing a pleasant and joyful atmosphere all bring about corrective experiences. At the same time, the therapist and client need to consider practical strategies, which help the ADHD client to work through life challenges.

Ulla Dahlen (Ph.D) from Finland addressed The Impact of Severe Client Trauma Experiences on Therapist and Therapeutic Relationship: Case Example from Female Genital Cutting Research. In severe cases of trauma, secondary traumatic stress is a risk for the therapist. The therapist's feelings and symptoms begin to look like those of the client. They have difficulty setting boundaries, as the client is constantly on

their mind. The therapist neglects self-care in addition to presenting their exhaustion through cynicism and feelings of guilt, disappointment and depression. Secondary traumatization happens little by little. Also, the therapist's personal trauma experiences leave them more vulnerable. The challenge for the therapist is to recognize the emotional boundaries and ownership of a particular emotion. Figuratively, in whose yard does the feeling or reaction belong? How should the emotional property lines be strengthened? The therapist must learn to see that they cannot change what has happened to their client. Neither can they control how the client will get through their pain and what will happen to them. The therapist, however, can give love, support, tools and empowering. They must also let go and release their client gently into Hands that are greater than theirs.

The President of EMCAPP, Werner May, taught on a topic that he has been developing for over twenty years: A Healing 'YES' and 'NO': Setting Boundaries through a Dialogue. To say 'NO' is very hard, as we would rather avoid the difficulties which arise from the word. Werner May challenged the participants to take a closer look at their personal history of dealing with 'NO': How did our parents use the word - and how do we practice it? Each 'NO' is likely to cause irritation! That is unavoidable. However, if someo-

ne else gets upset with my 'NO', that is not bad in itself or to be avoided. Rather, it is a signal that the other person is not able to deal with my 'NO.' The benefit of 'NO' is worth enduring someone's anger or irritation! Werner challenged us to be reconciled with 'NO' and asked if we also accept God as someone who sometimes says NO. Using a 'NO' that heals requires agreeing on boundaries during the 'time of peace', meaning while the relationship is peaceful. A healing 'NO' also needs to be accompanied by a supportive and open relationship, a meeting of hearts.

The EMCAPP-conference attendees left the venue thankful for the conference organizers and for the opportunity to come together with other Christian helping professions. Hopefully this is only the beginning and the conferences may continue in the future in other locations.

- The networking of Christian helpers is vitally important, Werner May mentioned in a newspaper interview.

- Don't stay alone, but come together. Organize training and other events and get to know each other. Have a united front, Werner exhorts. Coming together facilitates opportunities and strength which are not possible when we remain alone. We need each other in order to be encouraged and receive advice, he states.

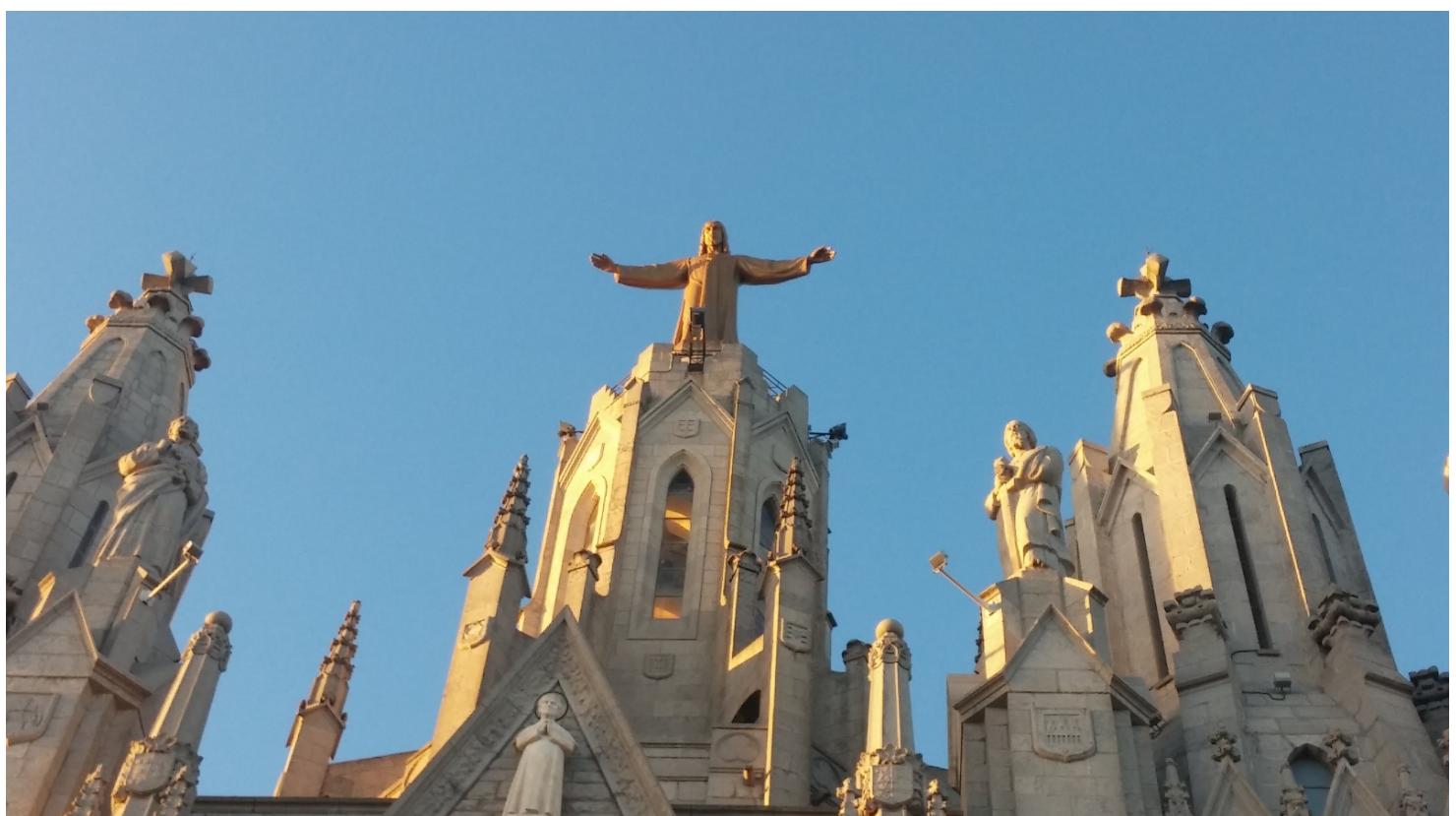
PROGRAM

I EUROPEAN CONGRESS OF CHRISTIANITY AND MENTAL HEALTH SCIENCES

Barcelona, Spain, 13-14 September 2019

13th September CONFERENCE

- 9:30-10:20h The association between spirituality and mental health – how strong is the evidence? Dr. Michael King: Professorial Research Associate. Division of Psychiatry. Faculty of Brain Sciences. University College of London. United Kingdom.
- 10:30-11:20h Catholic Christian Meta-Model of the Person Paul Vitz: Professor Emeritus of Psychology at New York University. Senior Scholar* and Professor of Divine Mercy University.
- 12-13h The theology of illness: the crucial role of prayer and grace in promoting genuine health. Dr. Jean-Claude Larchet: Philosopher and Theologian from the University of Strasbourg.
- 13-13-50h Contemporary neuroscience and religious belief. Dr. S. Lane Ritchie: Science and Religion, University of St. Andrews, Scotland.



14th September: SEMINARS

SEMINAR 1: Communications on virtues in psychotherapy: what brings Christianity?

9.30-11.00h

- Christian psychology. Werner May: President of the European Movement of Christian Anthropology, Psychology and Psychotherapy, Germany.
- Specific Christian aspects in psychotherapy. Anna Ostaszewska: Psychotherapist, vice-president of EMCAPP, Poland.
- Discussion

11.30-13.00h

- Experience of working with virtues for personal future. Andrey Lorgus: the rector of the Institute of Christian Psychology in Moscow, Russia, EMCAPP board member.
- Idealistic or realistic systems of personal values? Krzysztof Wojcieszek: Professor in the Pedagogium School of Social Sciences in Warsaw, Poland.
- Discussion

15.00-16.30h

- Christian Community Psychology and Social Transformation. Nicolene Joubert: Founder and head of the Institute of Christian Psychology in South Africa.
- Condemning Judgement and its Relation to the Internal Ethics of a Patient. Elena Strigo: head of Psychological Counseling Centre ABIGAIL in Krasnoyarsk (Russia), EMCAPP board member.
- Healing processes in the history of Christian faith. Francesco Cutino: psychologist, Italy, EMCAPP board member.
- Discussion

SEMINAR 2: Round table: Virtues and purpose in family therapy: what brings Christianity?

• 15-18h

- Moderator: Martiño Rodríguez González. Universidad de Navarra
- Dr. J. Perez-Soba. Professor and director of studies of the Master in Marriage and Family Sciences of Institute Juan Pablo II of Madrid. Professor of the Fundamental Morality and Christian Life at the Faculty of Theology San Dámaso.
- To be confirmed

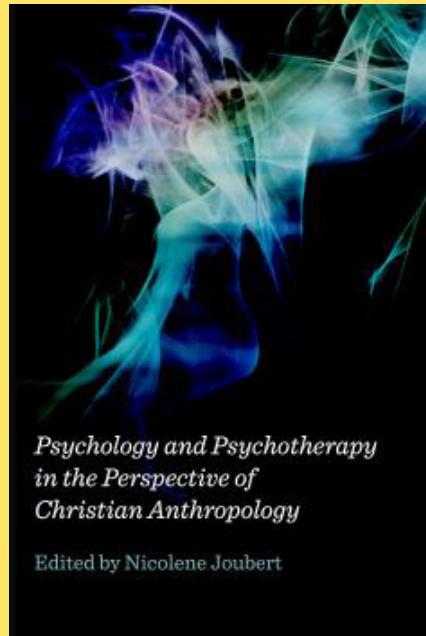
SEMINAR 3: Round table: Psycho-spiritual integration consecrated life: itinerary of discernment and accompaniment

9: 30-13h

- Moderator: Dr. Montserrat Lafuente. Psychiatrist and Abat Oliba CEU University professor, Spain.
- Dr Amadeo Cencini. Psychologist and theologian of the Salesian University of Rome.
- Dr. L.M. Garcia Dominguez. Psychologist and theologian of the University of the University of Comillas, Madrid.

The EMCAPP Book: Psychology and Psychotherapy in the Perspective of Christian Anthropology

“The view of human nature generally forms part of the assumptions that undergird psychological theories and psychotherapeutic approaches. In this book, Christian anthropology is articulated as a foundation for the theories, approaches and techniques applied in practice by the authors. Various contributions from European-based practitioners in the fields of psychology, psychotherapy and counseling are included. These authors draw scientific knowledge from the fields of psychology and psychotherapy focusing on intra-psychic aspects of human functioning, such as emotions, drives and cognitions as well as interpersonal and eco-systemic functioning. In addition to this, the authors consider spirituality as an intrinsic part of humanity, through which persons seek meaning and transcendence that influences physical and mental health. Spiritual insight is gained from the field of theology with specific reference to the Christian faith tradition. A wide range of topics, contexts, cultural, and ecumenical backgrounds are covered. Practitioners in mental health care and counseling would benefit from the knowledge, ideas and practical experience shared by the authors.” (Nicolene Joubert)



Editor:

Nicolene Joubert (South Africa)

English editing:

Dorothy du Plessis (South Africa)

Coordinator of the project:

Anna Ostaszewska (Poland)

This is a project of publishing the book which will consist of articles written by members of the European Movement for Christian Anthropology, Psychology and Psychotherapy (EMCAPP www.emcapp.eu). The authors are from different countries of Europe. They have a lot of experience in their countries and they participate every year the EMCAPP Symposia. They all agreed to contribute this project. The aim of the book is to present European ideas in the field of Christian anthropology, psychology and psychotherapy.

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Next Number

The topic is not fixed yet.

Anticipated publication date:
February 2020



About Us

This journal is published by the European Movement for Christian Anthropology, Psychology and Psychotherapy in cooperation with the IGNIS-Academy, Kanzler-Stürtzel-Str.2, D-97318 Kitzingen. EMCAPP as a non-institutional movement enjoys meeting Christian scholars and practitioner in the field of Christian anthropology, psychology, psychotherapy and counseling from all over the world and from most Christian traditions. We are focused on bringing together key persons from different countries. The richness of experience and background always stimulates and refreshes us.

This magazine is free and can be downloaded from our website. We appreciate everyone who recommends it.

Per year, two issues of the journal are planned.

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The Board of EMCAPP:

- Francesco Cution (Italy), clinical psychologist and psychotherapist, associate of the Italian Catholic Association of Psychologists and Psychiatrists, president founder of the association "Jonas is on the way", Rome.
- Nicolene Joubert (South Africa) psychologist, Head of the ICP: the Institute of Christian Psychology in Johannesburg www.icp.org.za.
- Rev. Andrey Lorgus (Russia), psychologist, Rector of the Institute of Christian Psychology in Moscow, <http://fapsyrou.ru>.
- Werner May (Germany), psychologist, former President of the Academy for Christian Psychology IGNIS www.ignis.de, President of EMCAPP Board.
- Anna Ostaszewska (Poland), psychotherapist, supervisor, one of the founders of the Association of Christian Psychologists in Poland (ACP). Vice-President of EMCAPP Board
- Elena Strigo (Russia, city of Krasnojarsk, Siberian Region), psychologist, psychotherapist at the Psychological Counselling Centre, member of EMCAPP Board.

The
 EMCAPP Journal

Christian Psychology
Around The World

What is Christian Psychology?
State of the State article
1. No living Article of faith article
2. What is Christian Psychology
3. What is Christian Psychology
4. Who is God?

European
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Psychology and
Psychotherapy



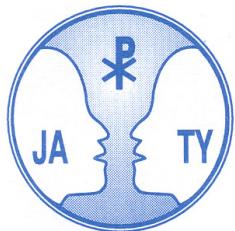
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Association of Christian Counsellors Finland

Seven statements of EMCAPP

- 1. EMCAPP is based on the faith that there is a God who is actively maintaining this world, so when we talk about Man we should also talk about God.**
- 2. EMCAPP acknowledges the limitations of all human knowledge and therefore appreciates the attempts of the various Christian denominations to describe God and their faith.**
- 3. EMCAPP brings together international leaders and pioneers in the field of Christian psychology and psychotherapy and its underlying anthropology.**
- 4. EMCAPP appreciates the cultural and linguistic diversity of backgrounds of its members.**
- 5. EMCAPP wants its members to learn recognizing each other as friends, brothers and sisters.**
- 6. EMCAPP encourages its members in their national challenges and responsibilities.**
- 7. EMCAPP has a global future and it is open to discourse and joined research opportunities round the world (World Movement).**

For more detailed version of statements: see www.emcapp.eu.