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Illness, Disease and Sin: The Connection Between Genetics and Spirituality

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The New Testament, while rejecting any superficial connection between illness and sin, does not reject a possible connection between illness and a person's relationship with God. An example can be seen in the story of the young blind man who was healed (St. John 9:3). His blindness does not result from any fault he or his parents had committed but apparently from God's wish to reveal his own healing power. The inner blindness of the Pharisees is a different type of blindness far more difficult to heal. The blind young man was actually healed, not only in body but also in soul. Such miraculous healings are rare nowadays. However, if one takes a closer look at modern genetics and psycho-neuro-immunological findings, one may come to a better understanding of how miracle healings are linked to man's inner life and therefore also to his religiousness. Many diseases have genetic backgrounds. Defective genes, however, do not necessarily lead to subsequent illness. Genes have to be switched on or off. Only activated genes trigger pathological change. The human brain and all of man's thinking and feeling are intimately connected with such activations. We may thus conclude that both inner life and religious outlook on life are relevant to the origin and development of diseases.

Keywords: *faith, communication, psycho-neuro-immunology, patho-genetic factors, cancer*

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I. INTRODUCTION

Illness¹ and sin are often thought as being connected. The New Testament rejects this (St. John 9:3). It does, however, talk about illness and a person's relationship with God. A person can reflect on the meaning of his illness by seeking to find out what God wants to tell him through what is afflicting him. A question put in this manner only has meaning under the assumption that God is a friend of man. The God Christians believe in is neither their enemy nor their opponent, he is not a punishing but a loving God. In fact he wants man to live life to its fullest (St. John 10:10).

But why, then, is there so much suffering and are there so many diseases in this world? The old question of theodicy arises. How can a good, almighty God allow what is happening? The following essay neither intends to (nor can) answer this question. There is suffering and illness that remains incomprehensible to man; they are related to the finiteness, brokenness, and sinfulness of this world. But besides this there is personal suffering and disease that man can come to understand. It is this aspect of illness that will be looked at in the following.

Today geneticists know a lot about background conditions of diseases. Many of them have genetic origins as do, for instance, all types of cancer. Few are inherited (about 5%), most are acquired (95%). But even inherited genetic defects don't necessarily lead to disease. A "sick" gene does not necessarily result in people getting sick. Genes must be activated or deactivated, meaning they must be switched on or off. So far, we know very little of the actual working of these switching mechanisms, but psycho-neuro-immunologic research has proven direct involvement of the human brain (Huether, Doering, Rüger, Rütger, and Schüssler, 1997, p. 126). Because there is a connection between the brain—which represents the thinking and feeling of a human being—and the genes, the entire inner life of the person influences these genetic switching mechanisms. In addition, the interpersonal relationships and the environment influence the genes. Thus, both the inner and outer worlds are closely connected to what happens on the genetic level (Bauer 2002).

Apart from emotional links to other people, man's religious life constitutes a decisive element of his internal world, influencing states of mind such as peace, joyfulness, harmony or disharmony, fear, and desperation. It becomes easy to understand that man's religiousness has an impact on matter, including the matter of genes, as well as on their respective interaction. "*Anima forma corporis*" is one of Thomas Aquinas's² central tenets addressing the soul as the informing principle of matter, which enables matter to become ensouled matter (Leib, see note 13). Modern genetics speaks of the in-forma-tion contained in genes or, as known today, of the organism's whole interactive system. We thus find connections between disease and man's internal and external worlds, as well as his approach to life and his attitude towards God. This doesn't necessarily have to do with personal guilt.

With a story from the New Testament referring to the relationship between illness and sin, the following is an attempt to develop a deeper interpretation of what disease is. In the story about the blind young man (St. John 9:3), external healing is followed by internal healing. Inner healing happens through the emerging relationship with God that transforms blindness to seeing and disbelieving to believing. This relationship with God heals and renders whole. Believing means involvement with God, obeying him and fulfilling his will. This obedience liberates man to find his identity, his truth, and his vocation. He can now “see.”

Sin is the opposite of obedience and surrender to God. It means intentional separation from God and his will. “Sin is turning one’s back on God. Originally—according to the word’s etymology—sin refers to the process of separating, of withdrawing from God and one’s fellow man” (Schneider, 1987, 2, p. 36). The result of this is a loss of inner coherence, a loss of one’s identity and truth. Such loss may incur concrete guilt or, even worse, lead to missing one’s life path. It does not, however, have to be personal guilt as not every inner withdrawing, and not all concrete guilt, derives from conscious action. Human beings are exposed to outer influences and also to psychic blockades. In addition there may also be the guilt of one’s forefathers affecting a person’s life. Diseases do not necessarily point to personal guilt but may well express an internal disharmony that has to do with the relationship with God. Disharmony of this kind affects the immunological system and influences genes.

II. THE NEW TESTAMENT EVIDENCE—THE BLIND MAN

In the New Testament Jesus’ answer to the question whose fault it was that led to the blind man’s disease, his parents’ or his own, is very clear: “neither he nor his parents are at fault; instead the Divine action is to be revealed” (St. John 9:3). Nevertheless, there is a connection between the illness and the young man’s relationship with God. On the one hand God’s glory is revealed; on the other hand the young man is led into belief and subsequently to inner sight.

Now, the first reason may be taken as cynical. A child is born blind to let God manifest his glory in him. The blindness is neither the parents’ nor the son’s fault, but God pursues his own purpose. The first question that might come to mind here is whether God created him blind intentionally just in order to reverse his blindness later. That would indeed be singular. We may thus presume that the young man was blind from birth on just as many other people are. Jesus crossed the path of the young man and healed him. God’s greatness is to be revealed: he can give sight to the blind, he can open people’s eyes, he can work miracles.

Now, here the double meaning of the word blindness becomes apparent. A person can be blind organically, but he can also be blind inwardly, that is in his soul. Then again, someone can be organically blind, yet still have inner sight. It is with this play on words—in the profoundness of its serious meaning all other than play—that the story in the New Testament continues. It finally says: “Were you blind, you would not be sinning. But now you say: We can see. Therefore you remain in sin” (St. John 9:41). What does the blindness consist of? Conversely, what does the sin consist of? What, eventually, does the giving of sight consist of?

The Pharisees apparently have the superficial understanding of sin that says that the parents or their child have done something wrong, have incurred blame, have broken one of the many precepts, and have offended God. Following this misconduct God now punishes the parents and child. The reaction would be: It serves them right, they are bad and sinful people. We Pharisees are better people, this could not happen to us. Such an interpretation is based on the act-result connection. Child or parent did wrong, they sinned, they trespassed and inevitably, punishment follows.

Jesus both rejects such a superficial understanding of sin—in his view no one sinned—and also wants to protect the blind man. He is already suffering enough from his blindness and he or his parents should not have to bear the additional burden of being made responsible for it. The blind man should be protected from the spiteful glances of those who say: look, he is a sinner that’s why he’s blind. At the same time, Jesus wishes to warn the Pharisees: do not claim to know the reason for this man’s blindness. You believe you know why he is blind. This reveals your own blindness. You think you can look down upon him. Do not fool yourselves, you are far blinder than he is.

The end of the story aims at just this feeling of superiority and of knowing so much better. He who thinks to know better than all others is actually the one who is blind. He who thinks he can see is in danger of committing sin. In contrast, the blind young man knows of his dependency on his fellow-men and on God. He needs leading and must allow it. He cannot find his way by himself. He is aware of his helplessness, which makes him humble. He needs to trust like a child. Those with eyesight, however, think they do not need any help; they see themselves as self-contained and self-supporting. They don’t even need God as a guide through life as they see and know everything, leading into arrogance and the claim of knowing why the other is blind. This is true blindness. “Were you blind you would not be with sin. But now you say: we can see. Therefore you remain with sin” (St. John 9:41).

What now are the healing and the restoring of eyesight to the young man? To begin with there is a direct intervention of God: Jesus mixes saliva and earth, applying this to the blind man’s eyes. Then the person himself must act too, he is told to go and wash his eyes. He obeys Jesus. As a result

this rids him of his external blindness. Subsequently a much deeper process is initiated, slowly leading the blind man from disbelief to belief. This results in ridding him of his inner blindness. As Gnllka said, in this reading “Christ and his self-revelation occupy the foreground”³ but surely it is not forcing the gospel too much by also looking into the story of the blind man. In addition to the concrete “therapy” that heals his external blindness we may also follow the path leading to the curing of his inner blindness. “Jesus, after having opened the eyes of the body, went on to open the eyes of his faith” (1983, p. 80)

At first “the faith of the blind-born man is not mentioned but he does what he is told and goes to the pool of Siloam to wash” (Gnllka, 1983, p. 76). His obedience is an essential constituent of faith. Man must obey God as Jesus did his divine father and, by following his example, man is led to inner freedom, to truth, identity, and personal vocation. Embedded in this newly gained profound trust man will see the world, as well as his own life, with different eyes. He will learn to understand anew. This will not happen in terms of personal guilt but in the light of his restored relationship with God, helping him to discover the sense and meaning that his suffering and his illness have.

III. FAITH

Faith does not consist in accepting the truth of statements. It is a personal event. I believe you, that is, I rely on you. I believe you that you can heal me. Here we have a basic meaning of faith in the New Testament. In many miraculous healing stories the patient is asked: do you believe that I can do that? (John 4:43–53, Mt.9:28). Also in the case of the man who was born blind, this is ultimately what is at issue. The issue is whether a person trusts that God can heal him. After the cure is effected, we often read “your faith has helped you.”⁴ His faith is “rewarded.” Man can and must cooperate in the miracles that are effected. At another place we learn that Jesus could not perform many miracles in his place of birth, because there they had no faith. “Because of their lack of faith he worked only few miracles” (Mt 13:58; Mk 6:5). God works his miracles in cooperation with man, and thus one could also turn matters around and say: Man’s faith, in response to God’s offer, “effects” the miracle.

In any individual’s life miracles are rather rare. This is why healings like the one described here can happen, but usually the patient must traverse various phases which slowly lead to his healing. The internal healing process involves going along with God, to have faith in him and to trust in him. The issue is a metanoia, a turning of someone’s life, moving from unbelief to belief, from concentration on the ego to concentration on God and his will and to find his own vocation.

The process character of faith is associated with notions of “obedience,” “finding one’s vocation,” “inner harmony,” “truth.” In the theology of Hans Urs von Balthasar the link between faith and obedience is a central element.

“If faith consists in getting into tune with and adjusting one’s existence to God, then faith can be called obedience, and rightly so.”⁵ “Faith ... is the unconditional dedication to God’s will,” as Karl Jaspers (2000, p. 101) summarizes.

“Once man has faith, he becomes really free” (Jaspers, 2000, p. 111). Here freedom does not denote arbitrariness but obedience. It denotes obedience, however not to others and to worldly mechanisms (since these obstruct freedom), but obedience to God who wills man’s freedom. He knows how each individual can be guided through his life events in such a way as to free him for freedom, how he can be liberated from worldly heteronomy. Even if this sounds paradoxical, only through obedience to God can man be freed from his worldly heteronomy towards his true self (cf. Beck, 2004).

Thus we can conclude with Jaspers (2000, p. 97) that “obedience is not ... sufficiently defined by external, calculable compliance with specific demands which have the character of legal norms. Rather, obedience encompasses man’s entire being, when he realizes with his whole heart what he understands to be the will of God.” The result is a way of acting which “springs from being” and which is guided “not by imperatives regulating external action but by imperatives which penetrate the innermost depths of the soul, into its very being prior to any activity” (loc. cit.). One could also say, in reverse, that these are the imperatives that rise up from the inner most core of the soul and touch precisely that point at which the person is wholly himself and from whose innermost source precisely that flows which he wills out of the center of the soul. Obedience to God does not result in heteronomy but in autonomy and self-realization.

Faith consists in relying on the supporting ground of life, a trust in the ultimate meaning of the world, a “knowledge” that one will not be led astray. Faith and knowledge are not opposites. On the contrary, there is a faith which amounts to a kind of knowledge which transcends intellectual knowledge, just as there is a “knowledge” which very much depends on faith.⁶ Thus it is not so much faith and knowledge which are opposed to one another but faith and lack of faith, faith and unbelief, faith and mistrust, faith and fear. Faith in this sense leads toward one’s own identity and truth and helps overcome fear with regard to life. This faith secures trust in one’s ability to develop one’s talents.

Every human being is endowed with talents, and he must not only use them but even increase them. He must develop three talents into six, and five into ten. One of the servants in Christ’s parable (Mt. 25:14–30) is vigorously scolded, because from fear of his severe master he buried his talent. Such fear can amount to sin, in that a person fails to realize his potential, he

owes something to himself, to God and to others. The place which he was to occupy remains empty. Thus the talent of the fearful servant is taken away.

The “disbeliever” will put his trust not in God but in himself and his own powers. He will render absolute the merely finite things (because he knows of no others), and will take care not to lose himself but instead hold on to that self, to his own life, and to other people. In clinging to the ego he will discover that his fear of losing his life or other people grows. His fear of loneliness and death will thus be further increased, as well as, paradoxically, his fear of life itself. Fear can be overcome only through trust in God. The nontrusting one might well be suffocated by his everyday cares. And in spite of all his cares he will not be able to prolong his own life. Instead of living in the present, his worries about the future consume him. He either flees into the past or to some utopian future. Fear deprives him of the ability to live in the “now.”

These fears and worries lead to an inner conflict. They can weaken a person’s immune system, or even influence the interactions of his genes. This weakened immune system or the faultily switched genes can favor the emergence of illness.

IV. SIN

Sin is the opposite of opening up to God and his will. It involves a conscious separation from God. Such failure to trust God and such unbelief can constitute sin (provided a person could know better and would have the capacity to change). Even the fear of the servant who buried his talent rather than push on toward his vocation can be sin. Intimidated by the greatness of that vocation he fails to mature into his own truth and identity. In all these cases man betrays his potential.

The fear of not arriving at one’s own truth and one’s particular vocation is what, in Søren Kierkegaard (1986, p 77), amounts to sin. “Sin is: to despair in the face of God and to refuse to be oneself, or in the face of God to want to be oneself.” At another place he puts it succinctly: “sin is despair” (p. 103), and still at another he summarizes: “This kind of despair means: desperately refusing to be oneself, or even worse, desperately refusing to be a self, or still worse, desperately to want to be someone else than oneself, or desiring some other self” (p. 51). In the end Kierkegaard concludes “that the reason why people are uncomfortable with Christianity is that it is too lofty..., because it wants to transform man into something exceptional” (p. 79).

The first of these quotations describes two wrong attitudes. The first consists in the attempt to hide from God, and the refusal of undertaking one’s maturation towards the fullness of life and one’s self as moved by

God. Such a person, out of fear of his own greatness, declines his vocation and mission, he refuses to develop his talents fully. This fear of becoming his own self causes him to miss living his life.

Man is designed for growth and for bringing fruit in terms of service to his neighbour and to himself. Here it must be remembered, however, that this human greatness and importance does not derive from man himself (which is also why any human arrogance would be misplaced), but from God. It is in view of this divine calling that man should recognize his greatness, and that he should derive the courage of growing toward this greatness.

The second type of wrong attitude consists in wanting to realize one's greatness and identity independently of God. Such persons endeavor to achieve their true self out of themselves. They want to do everything by themselves, want to be "free" in the sense of refusing to hearken to others. Such an attempt is doomed, because man, left to his own devices, will always fail on account of his finitude and the limits of his abilities. Since life is tantamount to growth, and since man must always grow beyond himself, the question arises whether he can himself know and prescribe the direction of his growth or whether this knowledge does not reach him from elsewhere (whether proceeding from an inner driving force or from without as an event, the future or something which may be specifically expected). Man has to respond to what reaches him.

Whether he wants to or not, a person must recognize that he starts out by receiving everything he has from others. He is begotten by someone else, has been nourished by others, placed in a given situation, endowed with a specific sex and with particular talents (depending on one's view, through chance, or nature, or God). Many things he owes to his parents who provided him with education and professional training, many things also to friends, siblings, and the conditions of his existence. He cannot take credit for anything first. This credit begins at the earliest when someone's talents start to develop and he begins to make something of his life. But a person's ability to use certain talents presupposes favorable conditions and external influences, which cannot be influenced by him (as for example good health, or intelligence), and which he cannot produce by himself. The person who grows up in poverty, who never learns how to read or write, may have many talents, but he can never fully unfold them.

In this way everyone must recognize his dependence on other people, on situations, on his state of health, and in the final instance on God. To try and lead one's life exclusively on the basis of what one can accomplish on one's own is impossible. Children "know" that, adults however often think otherwise. People with the attitude of doing all by themselves alone in the end will find themselves forced to manage by themselves. They must continuously generate the necessary self-confidence, self-acceptance, self-love from themselves, or they must "create" these resources. They must always prove how "good" they are, must present themselves publicly as "good,"

must “feel good,” clamor for others’ recognition, prove their greatness. Each failure will hurt their feeling of self-worth.

Sin is to refuse community with God (and others), which results from a curved-in heart.⁷ On the basis of such a refusal man fails to mature into his own truth and identity. He therefore will also be unable to love. Identity comes before intimacy, says Erikson (1973, pp. 150 ff). Only the person who lives in harmony with himself can love. Sin in the final analysis is a violation of love. But underneath this violation there are often quite different deficits, as for example an internal refusal of God. Some people will not abandon themselves to God. They doubt God’s good intentions. This is how the fall of man begins in paradise. The serpent plants the suspicion in his mind that God wants to keep the best from him. The deceiver suggests that, if man fulfills God’s will, he will miss out on something very important. In fact, this view corresponds to the life experience of most of us. To fulfill the will of another is taken to amount to heteronomy. The other’s will appears to confine him. This is why man must learn that matters are the other way around with God. To fulfill the will of God leads to self-fulfillment and self-determination.

Only through God can man unfold his potential. To fulfill God’s will is tantamount to achieving inner joy, inner peace, inner harmony. The Greek term for happiness, *eudaimonia* (“eu” meaning “good” and “daimon” denotes generally one’s fate), can be freely translated as indicating that man should follow his good spirit (eu-daimon). The end result of a life guided by the good spirit is happiness, this is doubtless how Aristotle would summarize the matter. In a Christian perspective, this letting oneself be guided by the good spirit amounts to “following the will of God.” In this context, the issue is not only finding happiness but also finding one’s own center, one’s own identity, truth, and vocation. The emphasis is not so much on the concept of happiness—in any event not the sense in which the “World” understand happiness—but rather on a perspective that reaches beyond the world. In the Beatitudes (which are praises of the blessings of happiness⁸) we read: “Blessed are the poor, blessed the hungry, blessed the ones that weep” (Lk. 6:20). None of this fits with the world’s view of happiness.

These beatitudes go beyond finitude and finite conceptions of happiness. They suggest another world in which even the poor and the ones with worldly handicaps have a chance. These sayings also suggest that man should be “poor through God” (Mt. 5:3), i.e. that he should be aware of his helplessness and dependence. The point of such awareness is not to humiliate man but to unburden him from the effort of needing to become rich and good on the basis of his own resources, and from the constant overtaxing oneself which results from such an attitude. Man must recognize that he is great and rich through God. The ultimate meaning of the Gospel always refers to life and freedom, never to destruction or suppression.

Thus the Christian concept of happiness corresponds most closely to “life in fullness” (Jn. 10:10). One usually talks about successful living (but what is meant by that term?), of inner peace or inner happiness. This happiness recurs again and again in Aristotle, when he speaks of human action: “We must add to what was said previously that “ethically praiseworthy” cannot be predicated of someone who does not enjoy noble action: no one can be called just, when he does not enjoy acting justly, and no one generous who is devoid of joy in acting generously” (Aristotle, *Nikomachische Ethik* (1985), I 1099a 14). Thus Aristotle’s classical (i.e. pre-Christian) Greek perspective on the ultimate goal of ethical action (i.e. happiness) corresponds to that perspective on the future according to which man is to have life and to have it in fullness,⁹ and mature into perfection of love.¹⁰ Man is to grow and to bring forth fruit.¹¹

In this broken and finite world, however, such a life, directed toward love, relationship, and the fulfillment of life can be attained only to a limited degree. The fullness of life and successful relationships can be experienced from time to time, but their perfection will be experienced only after the transition through death and into another world has been accomplished. Knowing about life’s finitude, the finitude of happiness and of success in living, Christianity points beyond this finitude. The point is not to console persons with a better beyond—even though in history this has often been done. The issue is to make it clear that one’s orientation to love and fullness, in spite of all negative experience and finitude, is not vain, but will be fulfilled. Man’s longing for happiness and peace reaches for “the infinite.” Man was promised that in spite of all suffering in this world he will find this happiness. His longing does not deceive him. What he has begun, what he must leave incomplete and imperfect, will all be realized.

V. LIFE AS RELATIONSHIPS

All life realizes itself in relationships. Relations between man and woman, between children and parents, between siblings. This phenomenon is present already on a cellular level, in embryos, fetuses, in the infant between itself and the parents. The first experience of a child is the encounter with his mother. In the uterus the first sense experience captures the sound of the mother’s heart rhythm. Later the child recognizes the mother’s voice, and in her face the whole of being. In encountering the mother, the child is “called into consciousness” (Balthasar, 1990, p. 92).

This intimate relationship between parents and children is broken up at the very latest during puberty. The harmony is destroyed, hormones change, boys become young men and girls women. A distance is placed between teenagers and their parents. The young person begins to distance himself. Parents lose their previous ideal status, their exemption from character

faults. In the biography of Jesus this time is described in terms of his disappearing for three days. His parents search for him and finally discover him in the temple. To their reproaches concerning his having run away he answers, as though this was the most natural thing: "did you not know that I have to be in what belongs to my Father?" (Lk. 2:49). Jesus leaves his family not in order to upset his parents or from spite (which would not be unheard of during puberty), but because he must give greater obedience to his heavenly father than to his parents.

He does something similar again during the wedding at Cana. Here he is already thirty years old. At this time this was considered mid-life. His mother, having noticed the embarrassment that during the wedding there was no more wine, asks him to do something about it. But he sharply rebukes her: "Woman what have I to do with thee" (Jn. 2:4). He knows that he may not primarily comply with her request, but that he must follow the will of his divine father. Having made this clear, he responds to his mother's plea (which perhaps coincided with his own wish). He takes seriously his mother's concern about the awkwardness of the situation. He does not want people to be embarrassed, but he insists on the right context.

Such an exit from the family which still maintains relatedness constitutes, philosophically speaking, a transcendence of being, from dependence on parents toward a dependence on God. There is no life without dependence, the decisive question only concerns: on whom. Dependence on humans does not permit a person to become free and to find his own identity and vocation. It is only the dependence on God that permits persons to permanently realize their freedom, and to discover their own unique identity, truth, freedom, and vocation. God opens spaces, whereas man occupies spaces. Where any man is placed, no one else can stand. But where God stands, precisely there is room for man too, and for his finding his center and harmony. God is substance and he has substance (*sub-stare*: standing under). He wants to help man toward his own greatness. This is what authority, rightly understood, amounts to (from *augere*, to increase).

Man can find God in his internal voice, in the voice of truth, in his intuition, in the meeting with different human beings (God sends everyone from time to time people to speak with), men can find him in the silence of a monastery, in a church, in nature, in prayer. You can talk to God as you would talk to a good friend. He knows you and your troubles. Don't take the trouble to ask every question. Step by step you'll get answers, you'll find God in the situations of your daily life. Give him space and be on the alert for his voice and for the daily situations where you can "meet" him, inside and outside. Internal joy is the indication of being congruent with his will.

Man's relationship to God is a decisive element in the process of his human maturing. Many neurotic diseases originate when certain steps of maturation, as for example in puberty or mid-life, have not taken place. Especially in puberty and in mid-life situations the connection with God's

liberating power is indispensable. With regard to man's mid-life, C. G. Jung (1994, p. 119) remarks that he encountered no patient beyond the middle of his life "whose problem was not ultimately rooted in his religious attitude." Jung even thinks that "the problem of healing ... is a religious problem" (p. 125) and that psychic problems belong in the area of theology:

Today destruction has reached us, the soul is damaged, and this is why patients impose a priestly role on the psychiatrist. They expect and demand that he will redeem them from their suffering. This is why we psychiatrists must attend to problems, which, strictly speaking, are actually the responsibility of the theological faculty. (p. 128)

The middle of a person's life is a time in which psychic maturing must be completed, and in which a spiritual turning is required. Whatever a person finds outside of himself during the first half of his life he must now discover within himself. If the first half was devoted to the construction of his external field (profession, family, housing), the second half must take care of the "inner house." Persons must now address the essential questions of life. They must face the basic issues of being and death. This does not mean that they should simply retire. Quite on the contrary, it means that their life should become more authentic, and that it should draw from deeper sources. Johannes Tauler, a medieval mystic, describes how persons during this phase of existential turning are often placed by God in internal turmoil, and that he can survive such turmoil only if he entirely abandons himself to God. Man ultimately finds his inner bearings only at the age of fifty.¹²

Here too there is the risk of deficits in maturing. Many, instead of concentrating on their inner life, want to be young again and turn back the time. Instead of examining the problem of the world's finitude, of its meaning, and of developing their internal maturity, they try to make up for what they have missed in previous years. Since experiences, however, have their proper time and do not easily yield to later efforts at "making up," a great risk of inner disintegration is the result. Especially in such phases there is a tendency to suppression. Many conflicts between people originate from lacking engagement with the demands imposed by this phase of life. These in turn cause psychic damage, hinder the integration of one's resources, and can even lead to serious illness (as for example the depressions which increase during this phase). A willingness to attend to the specific demands of this period in a person's life could be profitable for his subsequent life and his human relationships. This is the time during which many are close to leaving their professional life behind, but are faced by the real possibility of surviving till the age of ninety or hundred. Thus it is important to cope with such times of reorientation well, in order to be able to creatively shape the remainder of one's life.

VI. GENETICS AND PSYCHO-NEURO-IMMUNOLOGY

During his whole life man is engaged in such phases of maturing and such relationship events. Everything that happens affects his bodily, psychic, and spiritual being. A person's body is constantly in the process of being renewed. All its cells rejuvenate themselves, thus constituting toward the end of a person's life a body which totally differs from the one he started out with. And yet that person always occupies the same "lived body,"¹³ and thus remains the same irrespective of any change.

Bodily relation-events reach down to genetic linkages. Genes are not merely present, in their damaged or healthy form, but they interact, and they can be switched on or off. Only switched-on genes are effective. The mechanisms for such switching are only partially known so far. But it seems that the brain, and thus a person's thinking and feeling, is involved in them. "Also the brain directly influences which genes of a cell are activated and which functions of a cell are subsequently realized" (Huether et al., 1997, p. 126). These cells thus are engaged in a "dialogue" with one another, with the proteins, and finally with the brain and the neural network. Similarly human relationships can shape genetic linkages:

That inter-human relationships influence the activity of genes and biological processes has also been shown to be valid for the immune system. Stress and depression change the activity of genes not only in numerous immune messenger substances (cytokines), but also within the cells of the immune system (T-cells and natural-killer cells). Thus their resistance to pathogens and to tumor cells can be decisively reduced (Bauer, 2002, pp. 143 ff).

Psychic stress and depression can lead to a turning off of certain genes of the immune system (Weizman, Laor, Podliszewski, Notti, Djaldetti, and Bessler, 1994, pp. 42–47). "Psychic stress involved in depression [turns off] several genes of the immune system, which are responsible for creating immune messenger substances" (Bauer, 2002, p. 136). The stress-hormone cortisol is able "to turn off the genes of all immune messenger substances (cytokines)" (pp. 132 f.). Thus the internal world as well as the external world of man can influence his genes.

Stress is a rather encompassing concept. It is defined as inadequate adjustment to changed life conditions (Selye, 1946, pp. 117–230; 1954; 1977). Stress situations are defined as "selective strain of different kind and duration, psychic, interpersonal, and social. They threaten, or challenge the organism to do something—to cope with them, to master them, or to be overcome by them" (Bräutigam, Christian, and Rad, 1992, pp. 67 ff.). Such stress can arise from psychic causes, because a person is burdened by certain life situations or by unresolved conflicts. It can arise from interhuman problems involving damaged relationships or difficulties between parents and children or from psychic conflict.

Stress can also result from a failure to grow psychologically, from a person's stagnating in his inner development, his lagging behind certain development phases, an imperfect separation his childhood parents' home, an unhappy puberty, a succumbing to certain fears in regard to new life tasks in school or profession. Finally there can be the stress at the workplace which results from being overworked or being in the wrong position. A person can have chosen the wrong profession, can find himself placed in the wrong environment, he can fail to live his own life. Here as well religious aspects are important. Ultimately a person can sustain all the burdens, revolutions, crises and fears of this life only if he trusts himself to God's guidance. Only God, ultimately, can help him through all those difficulties.

Negative disharmonies in the sense of "distress" (or dis-stress) must be distinguished from positive stress (eu-stress), which can bear witness to a congruent life. Here a person is at one with the will of God and enthusiastically (from *en theos*—being in God) plunges into his work, having come "into his own," having found his vocation. A person's experience of "stress," as when he works much, can still, if it remains within bounds, be conducive to health and health stabilizing rather than disease inducing.

On the psychological plane the issue is to resolve conflicts. These conflicts, just as certain forms of depression, can sometimes be worked through and healed to some extent (Bauer, 2002, pp. 141–444) with the help of psychotherapy. It remains an open question however how deep such a therapy can reach. Psychology cannot free man of his fear of death, it cannot give trust in life, and cannot say anything about the meaning of man's existence. These questions engage the spiritual and religious dimension of human existence.

On the spiritual plane the issue is—as Ignatius of Loyola has described it—to discern the spirits.¹⁴ The point is to examine one's internal movements of the soul and to understand why one is today depressed and tomorrow happy, why today disconsolate and tomorrow consoled. Consolation for Loyola bears witness to the fact that a person has unified himself with the will of God and that one feels inner peace, joy, and harmony (one is attuned to the will of God). Disconsolation results from the experience of a separation from God and his will. This separation in turn generates loss of inner unity, fear, and inner conflict.

More precisely, one must try to recognize the origin of these inner movements, whether they are from God, derive from one's egoism, or are induced by an evil spirit. Man should accept the good movements and follow them (thus securing peace for himself), but the bad ones he should bypass.

VII. ILLNESS AS A DISRUPTED DIALOGUE

Already the psychosomatic physician Thure von Uexküll considered diseases as expressive of a disrupted dialogue and of disrupted relationship-events in

connection with a patient's environment. He thus suggested defining "health" as a functional framework of relationships and "illness" as a dysfunctional framework (Uexküll and Wesiack, 1996, p. 44):

Underneath any illness, regardless of its particularity and specific nature, we should always discover the same—as it were isomorphic—constellation: a dialogue with the environment has been disrupted, because the appropriate programs for solving problem situations are lacking, or because the signs cannot be deciphered, thus compromising the 'synthesis between organism and environment.' (Uexküll and Wesiack, 1998, p. 305)

Thure von Uexküll's psychosomatic theory again and again emphasizes that illness results from the disruption of a coherence between the ego and its environment. He distinguishes two basic pathogenic factors: on the one hand the loss of a person's capacity for communication, which results in his feeling separated from reality, on the other hand the lack of a communicative relationship, which is experienced by the patient as a loss of reality and meaning. (Cf. Uexküll and Wesiack, 1998, pp. 504, 525)

The thesis that interhuman communication is essential even for the interaction between genes has already been introduced above: "The fact that inter-human relationships influence the activity of genes and other biological processes has been shown to be valid also for the immune system" (Bauer 2002, pp. 143 ff).

If psychosomatic theory interprets disease processes in terms of biopsychosocial events and thus understands illness as resulting from disrupted relationships with the environment and as a disrupted dialogue within the inner-psychic levels of integration ("disruption of relationships generates illness"), then it becomes possible to deepen this model to that dimension of the spirit, which is directed toward the ultimate horizon of being, and thus toward God. This disrupted communication can extend even to the genetic plane. Within an organism, cancer cells for instance slowly lose their ability for regular communication. Thus communication becomes disrupted, genes are switched wrongly, the cancer cells no longer integrate themselves into the organism of the whole and thus destroy it.

If disease rests on communicative events and if it is related to disrupted interhuman relationships or to a disrupted physiological balance (between attacking bacteria and the immune system's defense), then the relationship between man and God is highly relevant for medicine. "Communication is the locus of truth," as Karl Jaspers astutely remarks (Jaspers and Zahrnt, 1963, p. 70). This dimension of communication is also central for the concrete tackling of human life situations. Even if communication problems and unresolved conflicts should first be addressed on the psychological plane, they still touch the basic questions of life, of truth, and of God.

Interhuman communication problems can be solved in different ways if one does not restrict one's attention to the situations at hand but instead creates some distance from such wearing conflicts by looking beyond oneself toward God and by returning into oneself and remaining within oneself. Such a distance can engender a fresh start in approaching the other. Humans need an ultimate space into which they can withdraw and in which they will find peace and safety. From there they can master the task of ever reorienting themselves, of ordering their relationships and of breaking through incrustations. One's view is thus freed for reaching beyond the narrowness of an immediately pressing problem. Such imposition of a distance and such effort at self-centering can reactivate a disrupted communication and can overcome the loss of meaning.

Without such a perspective of withdrawal into oneself, which is a relationship with God that transcends the egocentric little world of the ego, man is stuck with his self-imprisonment, exhausts himself in his conflicts, becomes a prisoner of human sadness and of accusations against life; he hardens his heart, thus blocking further growth. All these inner blockadas and disharmonies can affect the immune system and the genetic plane, thus triggering the inception of disease and influencing its development.

VIII. PARADIGM SHIFTS IN MEDICINE, PHYSICS, AND BIOLOGY

This essay holds that neither a merely scientific nor a merely psychosomatic anthropology are sufficient for explaining human illness and disease (cf. Beck, 2003, 2004), and that a religious dimension is indispensable. This thesis fits in with paradigm changes that have already occurred in physics and biology. Already at the beginning of the previous century, Heisenberg's uncertainty principle recognized that nature cannot be exhaustively understood by scientific methods, since the location and momentum of microphysical particles cannot be determined simultaneously, and since any observed object changes as a result of its being observed. Similarly Einstein's relativity theory as well as the quantum theory (to name just the most prominent examples of this profound change) have fundamentally re-ordered our worldview. This change of paradigm in physics and its effects on medicine have been summed up by Carl Friedrich von Weizsäcker as follows:

In medicine, the radical changes that have been forced in the natural sciences by the quantum theory as the main pillar of modern physics have until now been too little taken notice of. The substantial separation of subject and object is no longer universally maintained. By contrast, medical thinking is still very often characterized by a polarizing opposition between psyche and soma, subject and object. If even in science, which

forms one of the foundational disciplines for medicine, the dualism between subject and object had to be overcome, then this should encourage physicians to overcome, in medical practice as well as in medical science, the still persisting outdated structures of thought which presuppose such a dualism. (Schmahl and Weizsäcker, 2000, C 133)

Biology, too, is going through a paradigm shift. For a long time it was thought that one gene encoded one protein, and that one protein served one particular function. This model had to be abandoned. It was replaced by the insight that one gene, depending on its environment, can encode different proteins, and that these proteins can also serve different functions (Hengstschläger, 2003). In addition, genetic science and psychoneuroimmunology have discovered the interaction of genes with the neural network and the brain as well as the influence of interhuman relationships on the immune system and on genetic switching mechanisms.

Biology's linear worldview therefore must be replaced by one that accommodates multidimensional switching mechanisms and networks. The issue is to trace the multiplicity and variability of specific genes' manners of functioning in different humans, the multidimensional switching mechanisms between the genes, and the complex systems of switching-on and switching-off mechanisms of genes through to their interaction with the brain. In addition there are the interactions between cells, between cells and organs, and between organs and the organism as a whole. The program and the en-coding for cells are contained not only in the genes but in the entire organism. The empirical concept of en-coding or in-forma-tion is complementary to the ontological concept of soul as an internal wholeness of the body.

Ontologically speaking, the soul expresses itself in the morphology. Empirically speaking it has been shown that the whole system and not just parts of it provides the information for the body. Man is a being that is "constructed" from inside out: his spirit and his soul in-form the body's matter from within.

IX. ILLNESS, DISEASE AND THE RELATIONSHIP TO GOD

Disease (and illness) is not in any immediate sense related to personal sin, or personal guilt. Still, diseases can acquire a meaning in the horizon of the patient's relationship to God. Sin signifies the conscious inner turning away from God, while guilt signifies more a concrete wrong action. Insofar sin can generate guilt. Guilt primarily means that someone is at fault because he owes something he could have done. Often guilt arises from inaction rather than from an evil act.

If one wishes to establish a relationship between disease and the relationship to God, then on a basic level one could say: Man should first

develop trust in the meaning of life and how it is guided. God is man's friend, he wants every life to be successful. Man is endowed with talents, and these should be developed. But this development is not to serve an egoistic self-realization; instead it is to be placed in the service of God, of one's neighbour, and of oneself. It is not self-realization but God-realization that is the aim. God's image in each individual should become visible.

This call for using one's talents, which can also be understood as a "call into one's own," is accompanied by a "call into the other." Acquiescing in the will of God can mean that one's previous life plans can be crossed through, or that one is led where one does not want to go (Jn. 21:18). The "call into one's own" as well as the "call into the other" ultimately result in the "call into freedom."¹⁵ The goal must always be love and service of one's own life as well as of the life of the other—with an interconnection between love of God, of neighbor, of self, and excluding hatred or suppression.

Furthermore man must learn, on the basis of a good relationship to God, to relativize the events of this world, without however falling into a world-denying lethargy. Keeping a relative distance from everything can help to improve one's capacity to engage oneself for others and to improve one's relationship to them. Dedication and setting boundaries are equally indispensable. Furthermore it is important to recognize that man can adequately deal with the various crises of life (especially puberty, mid-life turning points, ageing, death of relatives, crises in human relationships)—i.e. without incurring maturation deficits or falling back into outlived life patterns—only if he is open to God's help and guidance, which lead him beyond himself.

Man must go beyond his little ego, must find confidence in God who wants the best for him, who is not his enemy but his friend. God wants every human to have life, and to have it in fullness. Man can and must be open to God, must follow his will, in order to find his inner peace and inner calm. Such inner harmony provides a good precondition (even though no guarantee) for rightly ordering the material side of the body.

In a Christian perspective God does not punish man. But he designed the world and its structures in such a way that man punishes himself if he fails to subject himself to these structures. This is already true for the motorcycle driver who takes a curve at too high speed, and it is also true for psychological maturing phases that someone fails to navigate properly, as well as for the laws of the spirit, logic, reason, and the recognition of truth, all of which must be observed. It is in particular the laws of the spirit, insofar as these are oriented to the ultimate horizon of being, and in the Christian view to a personal God, which must be obeyed. To disobey these laws implies inner disorder and thus possibly also material disorder in the sense of disease.

But here we must distinguish: Young people often become ill, because their immune system is still weak, and must be strengthened through children's

diseases. Old people often become ill, because their immune system is weakened through general physical decline. But there are also diseases that can express an inner turning away from the spirit. These result from a person's having acted against the laws of the spirit in their orientation toward truth, God, and his will.

In this latter case there may be a deviation from the path described above, a missing of one's vocation, of one's own truth, of one's identity, a defiance of God's will; there may be a misguided love of self and lacking love of neighbor, a lack in knowledge of self, knowledge of God. None of this necessarily involves guilt, because it can happen unconsciously. But surely the breakout of a disease can point a person to possible deficits of these kinds. Just as in the story of the blind man, such a disease can guide him from lack of faith to faith, from not-seeing to insight, from heteronomy to autonomy, from illness toward healing and to salvation.

To be sure, not every inner disorder immediately leads to a disease. There are many mechanisms for repair within a human body, which fix damaged cells or destroy them. But any long-term disregard for these essential questions, or any prolonged deviation from the right path, any long-term discrepancy between the will of God and the will of man between what a person has already recognized as calling for implementation and what he actually implements—all of this can form the background of a disease. It is especially the discrepancy between what one has already recognized as necessary and one's failure to act accordingly which provides a significant potential for conflict.

Such situations do not always involve sin or guilt, since there are psychological disorders which can be responsible for a person's lacking implementation of what he recognized as necessary. Sin is present only where a person consciously turns away from God and where he acts against God's will. Both Balthasar (1977, pp. 405–413) and Rahner (1954–1972, *Schriften* VII, p. 416) call "sin" the conscious defiance of a concrete call from God. Only the patient himself can look into himself and determine accordingly what his possible contribution to his plight is. This is why we must reject any attempt at externally imposing a connection between disease and sin, while still insisting on the legitimacy of the question concerning the meaning and purpose of a disease. The perspective offered here thus encourages questions like "What does God want to tell me through this disease? Am I missing my vocation and my truth, have I failed to ask the question concerning God? Is there an indispensable inner change which I have failed to make, have I worshipped false gods? Am I eaten up by envy, is my arrogance and insufficient modesty the basis for my inner deficiency, or am I a Pharisee, thinking I can see and yet being quite blind?"

If all such probing into the meaning of a disease should remain unsuccessful—we must always accept that some things will remain inscrutable—there still is a final option for interpreting a disease: compassion

with the suffering of the world, or bearing the suffering for problems which others (for example one's parents) were unable to solve. Often it is the weakest, the most sensitive member of a family who "carries" some suffering or a disease, because others (parents) have failed to confront their biography and to resolve their own inner conflicts. Whatever is not resolved and redeemed will be carried on into the next generation. This fact is well known in psychology. Theology has thought about such connections with the idea of original sin. Such entanglements are passed on from generation to generation, sin reproduces itself. Therefore each generation is even obligated to confront their own life, in order not to pass on unsolved and unredeemed problems. This is why the question concerning personal sin and guilt is so difficult to answer.

Ultimately, some diseases will permit being interpreted in the horizon of God, and as an expression of a patient's relationship to God, others will not. But it is always worthwhile to try such an interpretation, because a deeper insight can encourage a turning around, and thus can further the healing process. Even cancerous processes can be reversed, even up to their very final stages. "Indubitably documented spontaneous remissions prove... that up to an advanced stage malignant disease can in principle be considered a potentially reversible process" (Kappauf and Gallmeier, 1999, p. 95). Patients who experienced such spontaneous remissions reported the following about their healing:

"1. The threat to life which is associated with a tumor forces a person to address death and dying and raises questions concerning the purpose of life. 2. As a consequence of such considerations, previously accepted ways of behaving and experiencing are questioned. 3. There is a preliminary new definition of the question "to what purpose?". 4. This new definition contains changes in previous patterns of experiencing and behaving" (Heim and Schwarz, 1998, p. 157).

From the story about Lazarus we know that he was already four days dead when Jesus called him with a loud voice back into life. The loud voice of a serious disease is able to call many internally dead people back into life. Even if cure is no longer possible, a patient, once he has made the inner turn, can approach his death in a more conscious way.

NOTES

1. Translator's note: The German term "Krankheit" has two English translations: disease and illness. Whereas disease covers the objective (scientifically accessible) aspect, illness concerns the experience of being sick. I have tried to use these two terms according to context.

2. Cf., among others, Thomas Aquinas, S.Th. I q. 76 a. 1 u. 3.

3. "To be sure, what is of interest here is not the anthropological, but the christological issue. The man's illness provides Jesus with the opportunity to reveal his saving power" (Gnilka, 1983, p. 75).

4. Mt. 9:22; 15:28; Mk. 5:34; 10:52; Lk. 17:19; 18:42. This meaning is connected with that of faith as obedience.

5. v. Balthasar (1961, p. 212). This identification of obedience with faith is criticized by E. Biser, who argues that under the demand for such obedience man is denied all independence and freedom (1987, p. 236). Against this it must be emphasized that it is through obedience to God that man is freed from the wrong kinds of dependencies. This process of being freed him “from” such dependencies thus amounts to a becoming free “for” accomplishing what God’s will imposes. It is thus the very obedience to God which leads man into freedom, rather than forcing him to bypass freedom. If God is freedom, then dependence on God cannot render a man un-free. This is precisely what distinguishes dependence on God from dependence on humans.

6. Historical facts, for instance, must be believed, because no one of us today was present at the birth of Goethe or Kant, so as to be able to confirm the report of these facts. At issue here is a common consensus among scholars and the correctness of the records. Similarly in science many data must be accepted from other researchers, and thus must be believed. It is impossible to duplicate every experiment.

7. Cf. Greshake (1997, pp. 326). The concept of “ill” (German: *krank*, transl.) is etymologically related to “being curved” (*krumm*), “being twisted” (*verdreht*), and to the verbs “to cringe” (*sich krümmen*), or “to curl” (*kringeln*).

8. The German *Seligpreisung* contains these elements of *selig* (i.e. blessedness, but also happiness) and *preisen* (to praise), transl. note.

9. “I have come that they might have life, and that they might have it more abundantly” (Jn. 10:10).

10. “Be ye therefore perfect, even as your Father which is in heaven is perfect” (Mt. 5:48). Perfection here concerns a moral demand. The issue is not perfection in being. This is unattainable for man as created, and as distinguished from God’s perfection.

11. Cf. Jn. 15:1–17. The issue here is perfect love, perfect joy, and bringing forth fruit, or more precisely, to “bring forth more fruit” (Jn. 15:2). Here again we find the idea of growth toward perfection and fullness of life, not the idea of settling in what has been accomplished. Standing still is tantamount to regression.

12. See in particular Tauler (1961, pp. 163 f, (sermon 19). Cf. also Weilner (1961, pp. 165 ff), and Grün (2001). This latter book opposes the views of C. G. Jung, psychological views, to the spiritual ones of Tauler.

13. The German language distinguishes *Körper* as the material aspect of a person’s body from *Leib* as what relates to a soul’s being embodied. I have tried to capture this difference by the term “lived body.” The difference becomes perhaps even clearer if one remembers that the *Körper* is what returns to dust when a person dies, whereas his *Leib* is eventually—and in a refashioned form—resurrected (translator’s note).

14. The chapter concerning the so-called discernment of spirits in his book on spiritual exercises (Ignatius von Loyola, 1979, Nr. 313 ff) bears the heading “The discernment of spirits. Rules by which to a certain extent to explain and to scrutinize the different movements which arise in the soul; the good ones, in order to accept them, and the bad ones in order to reject them.”

15. In his dissertation, Michael Schneider has developed this complementary interrelatedness of the “call into one’s own” and the “call into the other,” as resulting into a “call into freedom”; see Schneider, 1987. Beide Bücher sind von 87.

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