

Delectatio in felicitate alterius – Benevolence Theory

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Introduction

Following the precedent of the various holy scriptures that exist on the planet, “benevolence theory” was founded by Leibniz with the above Latin phrase (“delight in the joy of the other”) about which philosopher Robert Spaemann wrote a classic book. [1] Does it exist, can it be explained, what is its secret? Only persons – human persons up until now – can understand benevolence. For knowing about the possibility of benevolence in another is what makes a person. There is an elaborate scientific theory about this trait which was recently reviewed by one of the authors. [2]

Besides benevolence, there also exists money in the world. And so does cruelty. Cruelty is when benevolence is actively denied even though it is vitally needed. Cruelty is what must not happen in the world – genuine evil. Cruelty is the only evil. It cannot come into the world spontaneously, as benevolence does under certain conditions, but rather is like a transmissible disease that is spread as if under a bad spell. “This is the curse of the evil deed that it procreatingly must give birth to evil”, poet Schiller put it. How the first evil came into the world is still an open question – despite the incomprehensible story with a fruit in a holy book.

Generation of Benevolence

Benevolence Means Good Will

Benevolence is a strange concept. To crave what is good for the other – a genuine altruism. Why should that exist? What is its secret? The “selfish gene” can only explain pseudo-altruism, which works via a subjective egoism that responds only to appearances. This is how motherly love in the animal kingdom is scientifically understood. But this kindred trait does not look into the other. The secret has to do with consciousness, with the other’s soul. How beautiful can a soul be?

The answer is: infinitely beautiful. The soul brightens up while its unlimited dignity is appreciated. Personal dignity is an “absolute” value, following Jefferson and Kant. It is able to shine without limit. Any little joy, if desired by the other person, can become an unlimited present to both. Persons can make each other such presents. The 'excess value' (mehrwert) hereby comes from a positive feedback. The latter acts as if a third – omnipotent – person were partaking. The very consciousness which I experience at this very moment is also a gift from an invisible third party (the non-me), but its immediate intentionality is not obvious.

Some people say consciousness does not exist. They say they have no consciousness, tongue-in-cheek. Pleasure without consciousness is impossible. But there is also that prison-like character to consciousness. Like the Now of momentary experience, which only exists in consciousness, it is inexorable: there is no escape from it. The movie of conscious life is an imposition with respect to which at any moment, both now and at the moment of dying, the question of its being acceptable arises as the perhaps most daring question. Is it not pure slavery?

This Cartesian question lies at the heart of benevolence theory. The smile of happiness of another slave of consciousness looks like a smile of affectionate bonding. Since the latter smile is of vital importance to a bonding partner (for example, a toddler looking at his mother), activities to reinforce that smile can be triggered. All of this is pure self-interest, of course. But that is not all.

The Charm Explosion

This is the rarely told story of the charm explosion that can be observed in watching the interaction between mothers (and fathers) and their offspring. Marilyn Monroe was an orphan who consciously developed this communication channel to perfection. She still used it beyond the age of toddlerhood. People later often misunderstood her overwhelming smile to mean other things. She never quite overcame the fact that, apparently, no one really appreciated the meaning of her smile. A strong search for bonding and protection, in a positive feedback of mutual benevolence, was the meaning. How can one be sure?

The interactions between mother and toddler (a nice word specific to the English language) explain the origin of genuine benevolence. But is it not the brain that defines humans? To that question the answer appears to be no (there exist instrumentally more intelligent animals on the planet, cf. [2]), but let us return to our context.

My mother (the first author remembers) when I was 17 months old once drew open the curtains after my afternoon nap to let in the sun while smiling herself like the sun. I saw her for the first time. Delighting in the delight of the other? It is all because smile and laughter look the same in humans, so I later learned. This gives rise to the misunderstanding that the other, if happy (laughing), was expressing affection (smiling).

Misunderstandings based on “ritualizations,” as biologist Julian Huxley called the underlying phenomenon, are nothing unusual in nature. Ritualizations are displays that originally belong into one context but are used in another. For example, bonobos express happy excitement by hectic copulatory activities that sometimes even result in procreation. No one knows why evolution seizes one or the other available display when bonding is freshly installed in a species. For example, submission was used in wolves (with the tail-wagging), cooing in humans (with the eye laughter), mounting in many other species like the African wild dog (where the females had to acquire a pseudopenis for the purpose) and the hominid species already mentioned. Imagine humans that laugh with the lower part of their body in full innocence. One should be concerned about the

future fate of our closest relatives since no one seems to know that this is the Bonobos' way of smiling.

But let us return to the toddler and his mother. To the dependent partner, the smile of affection of the caretaker (bonding) is of vital importance. But she is only laughing. This causes "dysfunctional bonding bouts" to occur from time to time, you will say, but that is all. This would indeed be the end of the story were there not a complication: the highly developed capacity of the hominid brain to simulate in real space (the so-called mirror-competence). Actually, it is "delayed mirror competence" which is at stake. A moment ago, Mom gave you that most tasty apple smilingly. Now, she is smiling when you experiment by pushing the apple toward her, and her face brightens up as she puts her teeth into it: does there once more occur an experience of delight, over there?

This is Leibniz's question. The answer is obvious. To a toddler, there exists no greater reward than that expression, shown to him. Its prompt occurrence confirms the suspicion. Hence suddenly two persons exist (per means through and sonare sounding, namely through the mask of the face in ancient theater). The suspicion of another center of optimization existing over there has arisen in the toddler. This suspicion is precarious (even as adults we allegedly cannot be sure that another soul exists – "solipsism," the doctrine that one is the only feeling soul oneself, solus alone ipse self, is an undisproved philosophical position) but is self-confirmatory to the toddler. The greatest positive feedback in the history of the planet sets in, leading to the stable formation of a person by allowing him to project a person (create a person) on the other side.

This positively self-enforcing (cross-enforcing) delight automatically includes the sun: a 'third force' is implicit. Right? The history of modern humankind comes to mind at this point. Nefertiti was the beautiful wife (there is this unforgettable bust of hers) of the pharaoh Akhenaten, who in turn invented the surviving biblical psalm on the sun (no. 19). The third force was later re-discovered by Buddha in Gaya, Rumi in Konya and Francis in Assisi, to mention the most singing voices. Or alternatively, if you take all your sober mind together, abstracting from the light and focusing only on the relations, you could claim that persons are just self-deluding immatures in accordance with the Marquis' heartless phrase that "it is none of my business if you are fond of me".

Delight in delight. D-light. Double light. Double bind? A double bind is a trap without escape hatch according to Gregory Bateson, with whom I had a beautiful long conversation in 1975 while he was cooking for us and serving us. The term "D-light" is new. It is the opposite of a trap. The future of the planet could hinge on the re-discovery of this mechanism. Persons are infinitely gracious when treated as persons. Some people – like the last pope – have a knack for bringing this to the fore: he once allowed a toddler to gently stroke his face for a long stretch of time while the TV cameras were running and running.

Value-blind Science?

We just applied a pair of tongs to a butterfly's wings – the only thing science can do, marvelling at the glaze and leaving open the question of whether its existence is a

misunderstanding or not. It is not, of course, even though it is as we saw. This is the power of persons: they can 'endorse' what they do. When informed about the self-fulfilling character of it all – such that the prince should become a toad again and similarly for the other side – they only throw a fleeting glance at each other with a laugh: the mutual endorsement includes truth. It came out of nothing but it did not remain nothing. “Creation out of nothing” is the technical term. No other example is known to science.

Science is not necessarily blind when it comes to those miracles that do not contradict it. They go under the trade name of revelation. Fortunately, the science at stake is being re-discovered from time to time in different forms. Recently, Yrishi Sefla gave a talk on his *Idéomathématique* [3] which explicitly combines mathematical purity with the fire of values. In the same vein, Yukinari Kurita two years ago sent me his manuscript on the quantum mechanics of the C-molecule, as he called it (C for consciousness), [4] which avoids the Cartesian route through the Hades of mere relations that is so characteristic of the West and the web of causation of the East.

There exists also a formal theory behind the above-described positive feedback that probes the universe in the other's head and subsequently gives rise to language in the sense of non-autistic communication. It is based on coupled autonomous optimizers called brain equations (or in fact two of them). The equations can be derived from a formal approach to survival in environments with space-dependent components [2]).

No scientific theory is ever certain. The simplest way to check on it is experimentation. In the present case, the corresponding experiments are of the non-interfering nudging type. They can either be performed with anatomically or functionally incapacitated human beings as partners (therapeutic experiments) or with potentially more intelligent non-human beings of biological or artificial origin that only lack the “mistaken coupling” described above (export-of-personhood experiments). If the underlying scientific theory is not misleading, personhood can be actively elicited (or “midwived” in Socrates' words) in all – not only human – “potential persons” [2]).

In the present context, another aspect of benevolence theory that is not defensive (trying to prove it) but constructive (trying to use it) is at stake. It has to do with power. Money also is a form of power. Possessing power is almost a curse. It gives you a responsibility without your choosing and without your having asked for it. This is because persons are so infinitely sensitive and easy-to-damage, delicate partners. We herewith enter the problem of society.

Delicacy

Persons are delicate. Money too has a lot of dignity. Persons are very delicate with money – as one can infer from the heavy sanctions through which it is protected in society. Stealing, for example, is very much frowned upon. Only so-called 'petty larcency' ('mundraub' – mouth robbery, in German) is legally accepted. Why do I mention money in our beautiful context? It is because of the many rights that money enjoys – almost as if it were a person.

Free trade, for example, which is a universal right that exists for all – except for the goods produced by the poorest countries – is one of the constitutive notions that hold the planet together today. For example, the most efficient – cheapest – ways of producing graphics cards for laptops or flat screens for TV sets will carry the planet. Less efficient competitors will have no chance on an open world market. The best software producers can then join in, and so forth at the next turn – a great chance.

The same insight, however, is often taken to mean that logic itself was the reason for a built-in progressive 'self-obsolescence' of most forms of paid-for human labor – so that fewer and fewer workers of more and more advanced skills are needed for producing the most advanced and market-dominating goods. Automation would then inexorably lead to the question of 'The Human Use of Human Beings', as Norbert Wiener called it. [5]

Theater

But is there no benevolence in this marketplace? In ages past, culture and its events – like theatre and exhibitions – were part of the way of life and were respected by and included in the market. The useless metal, gold, reflects this irrational original state as a respected asset up to this day.

Gold is related to the sun in its glare – and to theatre since persons play theatre with strong artificial or natural light. One sees that humanity could decide to blow up this latter sector artificially like that of the other human services. Art is thereby encouraged to go to the fore and so is media theory. [6]

Some societies get older and older – should they throw away these seeming non-assets compared to the wealth of hopeful young persons that are ready to work for almost nothing on the planet? Culture includes tradition, the humanities and the sciences. Most secrets of the world and of the truth – those that are bound to transform everybody's future life and the future marketplace – are still waiting to be unravelled.

Therefore the quest for truth could be made a high-ranking commodity – the third sector. We already encountered it in the context of benevolence nucleation in the playroom, where a "light from nowhere" intervened palpably. This light, which is greater than that of the marketplace, is worth pursuing further because even the marketplace yearns for it like a howling dog.

But would that not interfere with the self-regulation of the marketplace which enforces rationalization everywhere at the expense of job security and dignity? I do not think so. This is because the market responds to human – customer – needs. A bestseller is intrinsically unpredictable but sometimes, something shines through the driest text that electrifies a whole segment of world society so as if they were each talked to individually as a partner and friend.

If it is true that human beings are potential customers, and potential designers of goods and potential deliverers of services and potential deliverers of the most yearned-for truths, new services can be installed without violating the forces of the marketplace. We

love Luc Montagnier, for example, although we never met the discoverer of the AIDS virus. He was denied the right to continue working at his lab when turning 65 so he had to emigrate, it is said.

Anamnesis

Benevolence toward the ill has been the defining feature of a whole big profession in the marketplace (the medical and pharmaceutical sector). It even has its own ethics which, paradoxically, the market place – the customers – want to be upheld. It is a glaring mistake made by the whole pharmaceutical industry if it does not place a very high priority on bringing out affordable medication to hundreds of millions of suffering human persons.

No money for that? That is not the question. For your own children, you would have the money. So for your own citizens (one hopes). Thus, there are not just market forces in existence on the market place, but also forces of bonding, of mutuality, of benevolence, of love of the future. But everybody knows about that? I am not sure. We saw it above: there are things that everybody knows but nevertheless nobody knows. As a parent, you know it. As a citizen of your age, you don't. If no one talks of the sun, it is almost as if the sun did not exist.

Everything good also requires the spark of recognition in order for it to come to life. It is the same strange spark as in benevolence generation itself. One could be tempted to call it the “orgasm of bonding” but immediately realizes that this is not the right word because the flame goes much deeper. The poet Goethe implicitly revealed this in his autobiography *Fiction and Truth (Dichtung und Wahrheit)* in describing a hard-to-survive experience of his youth that apparently lies behind his famous poem 'Who never ate his bread with tears'.

The poem (which is not mentioned in the autobiography) reads in bad and incomplete translation: “Who never ate his bread with tears, who never through sorrow-ridden nights sat on his bed weeping, he doesn't know you, you heavenly powers: first you let the poor one become guilty and then you leave him to his torment.” He had been a teenager and member of an early pre-socialist youth gang that was not purely male. His father, who liked him very much, calling him 'Hätschelhannes' (Fondlejohn) and who was a high-ranking official in their hometown Frankfurt, persuaded him to tell him under an oath of silence everything he knew about his friends. Then the group was dismantled by police with jail sentences. I believe this event “made” poet Goethe even though the poem was written much later. He was in his teens, the nights were long, and there was no way to explain to his secret dame of heart what had happened. The whole heaven of lust went black (pitchblack orgasm is the technical term).

Bonding or rather, “seeing bonding” in the above positive feedback, is infinitely stronger than bodily attraction and its recompenses. Every dog-owner would agree but this is beyond the point. Goethe made a mistake, so you will tell me. Not by betraying his friends – there he remained innocent – but by his not going (like a shot-at Figure of recent history, but it is much easier if you are the one who has been shot at) into jail to

perhaps stay there. On the other hand, you cannot ask that from a youth. It was, of course, the father's fault that a potential whole lifetime was destroyed for two. We don't know whether he ever apologized. But a youth who has gone through this can, perhaps, only become a shining light. "Were not the eye the sun's own kin, how could the sun be caught within – were not in us the god's own force, how could things godly we endorse?"

After this "anamnesis" of a poet (in the medical sense of a case history), we return to the recognition between persons, the only flame which has no limit. This "recognition" Plato called anamnesis – remembrance – of the infinitely powerful attractor that lies behind it. "Sleeping attractors" are also the greatest secret in economy. Benevolence is a sleeping attractor. It was somehow overlooked by science just as in the theory and practice of the economy. This brings us to our last topic.

Realization of Benevolence

The Second Mail

The fact that it costs almost nothing to give every person on the planet a feeling of brotherhood by installing Lampsacus, hometown of humankind on the Internet, was first proposed in the proceedings of a conference published in 1994 [7]. The same year my wife, who had shared in the responsibility, and I were contacted out of the blue by a nation-wide prime-time TV report on "Germany's laziest professors" which were exactly two [8]. Imagine the free publicity! Like young Goethe, however, we were only able to see the negative side of this stroke of fate. To date, Lampsacus therefore still does not exist in reality in spite of two books written on it [9,10], one of which was elected "book of the year 1998" by the International Institute of Advanced Studies.

The palpable lack of a positive response may have to do with the fact that no government is needed any more, nor an organization, to implement this major transformer of the globe, but that a single individual who learns about the possibility of setting it up suffices. The only precondition is that she or he has some spare money to transform into a beneficial ten-billion fund that remains in the owner's possession, except for the returns which finance Lampsacus with its satellites and freely provided terminals and staff – a major employer in itself. There are quite a few eligible individuals on the planet. Imagine becoming postmaster of the world, but so in a cozy town full of cost-free services – all informational needs including educational and survival-related ones included.

In the older times – before the invention of the computer which makes the miracle possible to date – a single individual or family could likewise already have set up a cost-free post service for the whole of Europe, say. Thurn and Taxis of the 16th century come to mind: they could as well have founded this "second mail" already instead of the first one. Think how the course of history might have been changed to the faster and, presumably, better – especially so if the notion of benevolence had already been palpable in every act of service for the individual customer.

The real explanation why no one has so far stepped forward is, of course, that we were not efficient enough in our explaining it all – so that the forces of a conspiracy-in-the-

good-sense fizzled. Or is it because benevolence theory is so intrinsically tactless? Poet Hölderlin (quoted by Spaemann), said alluding to Socrates, “He who has thought the deepest is attracted to the most lively one – Alcibiades.” Socrates never touched Alcibiades as is well-known, but benevolence theory would be detracted from if this were the correct way of looking at it.

A single individual or couple of individuals as benefactors rather than governments suffice – this was our argument. It continues by our adding the fact that later generations will be unable to understand the delay. “Were your contemporaries not interested in the future?,” will they ask. And: “Did they not think of us?,” “Did they not know what being a person means?”

Benevolence Institutionalized

Genuine benevolent love can be paid by an individual only to a select few partners in a lifetime. But from this model source it can be distributed freely to others whenever a situation of power (which unlike private personal bonding is primarily anonymous) suddenly gives you an infinite responsibility. For any vitally needed benevolence, not denied by you, strangely creeps into the same crevices of the heart in which the most secret and deepest bonds are hidden.

Mother Teresa was not afraid of being genuinely loved by those whose lives (or deaths) she saved. Maybe this instinctive tactfulness of the human heart is the real reason why almost no one wants to look – like her – at the charming souls of those in need of his or her benevolence? Emmanuel Levinas was bewildered by the same problem. This would be an honourable excuse, but a mistaken one at that. Why is it misleading? It is because you need not be afraid that your heart will be carried away from your dear ones if you act like a person. There is an anonymity in personhood that is maximally tactful. For persons can be honest to each other. It is not a sign of your being a bad businessperson if you behave honourably. Bertold Brecht’s ‘The Good Person of Sechuan’ conveys the wrong message.

Lampsacus, with its benevolent university for everyone, would be the first large-scale example of planetary benevolence, implemented there to stay. Maybe it is indeed not possible? But then ‘I Robot’ nonetheless declares, together with my dear friend Keisuke Ito of the Future University of Hakodate, that a theory of benevolence is possible and shows that cruelty is indeed unnecessary. If this were not so, Lampsacus would be a charade, and so would be the United Nations, the proclamation of human rights, even Jefferson would be an impostor. So would be Descartes, the person who first (after Buddha) discovered a rational world full of light.

Hometown

The old Lampsacenes acted benevolently toward Anaxagoras, the inventor of chaos theory, since they gave him asylum after Athens had declared him an outlaw because of his great appeal to the youth as a first Socrates. On his tombstone, they inscribed in gratitude “Here lies [the person] who has thought the most about the limits to knowledge”. And shortly before that, when he was lying on his deathbed, they

approached him with the offer of a free wish. He indeed had something to wish from them: “Give the school children a month off when I die”. 700 years later, this custom was still observed in Lampsacus according to historian Diogenes Laertius. A benevolent intention, no matter how tongue-in-cheek, is palpable. The school children in all countries owe a great gift to this town which, by the way, still produces the best cherries of the world.

Is the world a sunny place on which it is possible to invest into the future for a dying continent, by striking up a friendship with the youth of the others? Is science (on which survival hinges since the enlightenment) something that can be taught interactively in such a way that you begin with the important questions rather than the current answers? Such that the future, the young people, can pitch in and become famous?

This was Sommerfeld and Bohr’s style 80 years ago, but the attitude vanished with them so that the quantum (for one) still is unexplained despite Einstein’s playful duplication proposal. Shall I repeat the latter here? “Prepare the same system in identical form twice by carefully halving an given original one; then separate the two by relativistic means; then you will have two specimens of identical properties on which you and your friend can make the two measurements that quantum mechanics claims cannot be both made”. He admittedly used a few more words, not anticipating that they would not be understood. The experiment (with one measuring station up in a satellite) still waits to be implemented. ESA’s 5-year delay could be brought to a glorious end by Lampsacus.

The science of benevolence is, perhaps, the most shining science. It deals after all with the smile, with the seat of the charm of laughter. Happiness displayed is miraculously a reward to the members of a certain species (no matter how hard the origins of this crazy trait may be to trace). The members of that species have a great responsibility: shall they start investigating the secrets of laughter and the smile?

There is something very special about laughter, so Carsten Niemitz of the free university of Berlin most recently found out in an ingenious experiment (the subjects were given a task in which they couldn’t help being amused and laughing without their knowing that the real task lay in that innocent side activity). You have to be careful not immediately to fall in love with his movie clips.

The chances and the risks of an eventually emerging benevolence theory – and benevolence practice – are remarkable. It calls for the most unprecedented and potentially dangerous experiment as far as the planet’s self-image is concerned. Is it allowed to explain love? The best advice of virtually everyone is needed. The smile experiment would be the first global scientific project.

Postscript (by O.E.R.)

Our topic was the regainability and sustainability of humanity on the planet, even its export if the answer is in the positive. Cruelty is a counter-proof to any possible future. Unless it can be made good again. But it cannot be made good. The best thing, people say, is to keep the memory alive. In this way, by the admission of a historical guilt on the

part of the responsible individuals and their community, at least the dignity of the victims is upheld. However, even this minimum is no longer the case if a gesture beyond the acceptance of responsibility is possible but held back.

What I have in mind is an official return of the German citizenship to the murdered children and their relatives and people. This gesture if withheld paradoxically keeps the spirit of the Holocaust alive on a low flame. A remaining hatred not addressed may not even stay in its flask forever. But would the German public go along? They would be deeply relieved if their honour was suddenly given back to them by this gesture on the part of their parliament. But how about the children of Israel? The children of the Holocaust have the first voice. They wait for this sign because they think of the currently living children who have to fear for their lives. And the citizens of Israel? The “sea of tears” could at last flow. The children would be given a sign.

I know from experience how losing a child through cruelty feels. It is the worst thing that can happen to the human soul. The customary concern about one’s own last hour disappears: there are worse things than dying even though nothing in the body hurts. It is a compelling reason to lose hope. “We cannot consent” is what we wrote on the tombstone. No tear can flow. “Unless you give us a sign that it is your own wish to be in the light again”.

Will Israel accept the gesture? The prime minister did not object to one of the present authors asking the Bundestag (I am now hiding behind the other two). This final gesture from Germany will, unlike its predecessors (compare Amos Oz’ moving 'Story of Love and Darkness'), not divide the country but be accepted in the name of the children.

Why do I tell this heart-rending story? Because there is an infinite light in it. Three million people said good-bye to a pope who had made peace with his “older brethren”. The light from the grave is only fictitious – a restored dignity. No real repair is possible. Humans do not have that power.

It does not matter: The most unprecedented gesture of history opens up a gate. The planet holds its breath – to be a different one afterwards. The smile invented on it will suddenly exist also in its consciousness: Planet Lampsacus.

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• REFERENCES

- [1] R. Spaemann, Glück und Wohlwollen – Versuch über Ethik (Happiness and Benevolence – an Essay on Ethics), Klett-Cotta, Stuttgart , 1989, p 123.
- [2] O.E. Rössler, ‘Nonlinear dynamics, artificial cognition and galactic export’, Computing Anticipatory Systems, D. Dubois, ed., American Institute of Physics Conference Proceedings Vol. 718, Melville, N.Y, 2004, pp 47-67.
- [3] Y. Sefla, ‘On the mathematical foundation of the sciences’, Lecture held at the University of Tübingen, 31 January, 2005.
- [4] Y. Kurita, ‘Toward the reconstruction of relative state formulation of quantum theory’, University of Alberta, 22 November, 2003 (unpublished manuscript).
- [5] N. Wiener, The Human Use of Human Beings: Cybernetics and Society, Houghton-Mifflin, Cambridge, MA, 1950.
- [6] N. Röller, Ahab's Steuer (Ahab’s Joystick), Merve, Berlin, 2005.
- [7] O.E. Rössler, 'Chaos, Rationalität und das “Bad-Trip”-Problem’ (‘Chaos, rationality and the bad-trip problem’) in Evolution – Entwicklung und Organisation in der Natur, V. Braitenberg and I. Hosp, eds., Rowohlt Science, Reinbek, 1994, pp 107-119.
- [8] ZDF “frontal”, 8 March, 1994.
- [9] W. Kriese and O.E. Rössler, Mut zu Lampsacus, Mauer Verlag, Rottenburg, 1998; English edition, Encouraging Lampsacus. Mauer-Verlag International, Rottenburg, 2001.
- [10] A.P. Schmidt and O.E. Rössler, Medium des Wissens – Das Menschenrecht auf Information (Medium of Knowledge – The Human Right on Information, Bern 2000.