Or: Why Zen and science get along very well and why more scientists (and other people) should meditate.

I just got back from a Zen sesshin. That is a week of meditation in which there is silence and between 7 and 8 hours of meditation per day; in this case also 6 hours on one of the nights. By meditation, I mean here: to engage only in the breath, moment to moment, without following thoughts or letting oneself be carried away by rising emotions. If you practise this regularly for a while, preferably daily, at home – and then additionally deepen yourself in such intensive times at a sesshin – you notice: you enter a space of inner silence, of freedom of thought, in which the mind is like a still surface of water, from which then, sometimes, from time to time, very profound insights flash up. Or in which one suddenly perceives external perception through the senses – what we hear, see, taste and feel – with a completely different intensity and in a completely new way.

When such insights are very „deep", they are called „enlightenment" in some traditions. But I think the word is a bit overused. You don't always have to wait for the very foundational insights. The many small ones along the way count as well.

What is happening here? I offer the following model of thought: If we assume that our mind or consciousness and our physical reality, i.e. our body, our brain functions, are expressions of one and the same reality, i.e. complementary manifestations of reality, then in principle we have two ways of accessing this reality:

One has been steadily developed by our science for about 700 years. It leads via the senses to the experience of external reality. Our scientific methodology has taught us to protect it ever better against error and to delve ever deeper into the nature of material reality.

The other way, the one via consciousness, we have not really cultivated systematically in the Western world [1]. Philosophers have always tried to fathom the structure of reality via what we in the West call „thinking". My guess is that by „thinking" these philosophers originally meant essentially the systematization of what I call „inner experience". Some philosophers and theologians have taught this inner path of access to reality even more radically and systematically. They are commonly regarded as „mystics", for example Meister Eckhart or Hugo de Balma [2-4], a forerunner of Eckhart, whom I have worked on. But in the West no veritable and systematic schooling of this inwardness has developed, and above all there exists no science of experience, that is, no systematic way of exploring, examining and critically discoursing such experiences.

That is why we are sceptical about them and relegate them to the realm of esotericism, arbitrariness and subjective edification. I, on the other hand, believe that assuming that consciousness is an equally primordial manifestation of reality as matter, we can also

explore this reality by turning consciousness back on itself. In the mystical and spiritual traditions, we then speak of „inner experiences“.

The outer experience of the senses shows us something about the material structure of the world, and our science has taught us much in this area since its beginnings. The inner experience shows us something about the inner structure, for example, of our lives. We call this „structure of meaning“ or „finding meaning“. But it also shows us something about the inner structure of the world. Then we call this „values“ or „finding values“, sometimes also insight into theoretical structures, as mathematicians or genius physicists like Leibniz, Newton, Einstein or Heisenberg had from time to time. After all, they had not found their theoretical models in sensuality, but in a kind of spiritual structure that they had, analogous to a small or larger spiritual experience, „from within“.

Culturally, we in the West have failed to systematize this inner access to reality. There are no places – such as schools or universities – where it is carefully taught or studied. There is no tradition here that examines, thinks about, researches and investigates what kind of access would be particularly useful for what kind of people, etc. Theology would actually be such a place, but in my view has limited itself to analysing the cognitive-conceptual structures that may be useful for interpreting some experiences, but do not replace them.

In the exercise of mind – literally, the ancient term for meditation is actually „culture of mind“ – we find that we can suddenly see through and let go of meaningless concepts and presuppositions that we have carried around unexamined all our lives. This is the tradition of radical examination of our thought structures and thought presuppositions for which the Zen tradition, within which I myself practice, is known. This is expressed in such famous stories as, „What is the true teaching?“ „No holiness – vastness!“ This tradition of radical examination is what Zen, and in fact every serious tradition of inwardness, Western or Eastern, has in common with the concern of science, namely to subject all opinions, all suppositions, to radical, methodologically validated examination.

The element of methodological safeguarding is very well-developed in our Western science and is a central defining feature. It is more difficult to gain in the field of meditation traditions. In the Zen tradition and other spiritual traditions, it is ensured by an iterative process in which the student tells his teacher about the experience and the teacher uses concrete practical expressions to check whether the statements are coherent – to compare them with his own experience and those of the tradition. So here too there is a kind of test criterion of validation of experience, namely through practice and comparison with tradition [5].

It is perhaps less easily understood and less universally accessible than in science, but no

less rigorous. After all, even in science, there are few experts in specific fields who can say whether a reported finding is valid or not, a model fit or not.

But certainly much work would have to be done here to afford a veritable methodology of validating inner experience. Originally, this was the programme with which Franz Brentano had set out in Vienna in 1873 to establish a new, experience-based philosophy, which then became popular as psychology, albeit relying more heavily on the outside approach of the natural sciences.

Culture of mind, for example through regular meditation, could therefore be useful, especially for scientists, but also for other people, because it helps us find a new approach to reality, namely the one from within. Sometimes it can simply be a creative idea of how to combine certain data sets into a meaningful structure. Sometimes it can be a clever idea about which research path to follow as a consequence of certain findings. Sometimes it can be a deep insight into value structures of reality that shows us which paths, presumably a priori, cannot be sensibly pursued further without first having to walk to the end of the wrong track and back again. Much waste of money could be avoided in this way. Sometimes it could be decisions and creative ideas about new topics that result. And sometimes it could just be a groundbreaking „epiphany“ of a whole new kind of theory.

It seems to me we have too much boring everyday science that costs a lot of money and doesn’t go very far. I believe this could be changed if more scientists, as well as more politicians and other people, systematically uncovered access to their inner sources of inspiration. By regularly cultivating their main tool, the mind. A scientist who does not regularly exercise his mind is a bit like an athlete who only ever challenges his body in competitions and in real time, but never exercises systematically. Such an athlete would perhaps also achieve good results. But with systematic practice, the results would be better.

Such exercise of the mind would also befit those who use their minds above all to attain knowledge. And that is nothing other than the practice of meditation. In my view, this would then also be a consistent continuation of science’s own process of enlightenment, which is urgently needed [6].

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