

Heft 69

Das Haidinger-Büschel als Urphänomen der Polarisationserscheinungen

Albert Pröbstl

Since Wilhelm Haidinger discovered the phenomenon of the ‘brush’ which is named after him in 1844, there can be no doubt that human vision comprises an additional sense for the orientation of a so called polarised luminance. In this paper the physical conditions under which Haidinger’s Brush is to be observed in transparent or reflective media are described in detail.

Furthermore it will be shown how Goethe’s work on ‘entoptic colour’, Steiner’s concept of the U-Region and modern physiological and natural science touch on a mutual ground that is to be characterised by Haidinger’s Brush appearing. The whole extent of circumstances which have its observation in common, distinguish it as a higher phenomenon among others, that it is the primary phenomenon of polarisation.

Das fünfte – das neue – Element

David Auerbach, Ernst-August Müller

The development of the earth, going from the Saturn, the Sun and the Moon to our present state, has called forth the four elements, heat, gas, fluids and solids. In each of the first three stages the germ of the subsequent new element was laid in the preceding one. Now that we have passed the middle of the ‘earth state’ we ask the question whether we can notice a germ of a new fifth element in the physical phenomena of solids, one which will later become the basis of our existence in the Jupiter state. In the Heat Course Rudolf Steiner suggested that a new element, the U-region beneath that of solids, may be found where form acts upon form. He suggested that the image of such an element may be found in so-called optical polarisation phenomena. We examine this idea, looking first at the various natural and artificial polarisation phenomena in nature and those in technology. We then look at characterisations of the possible qualities of such a new element in the Jupiter state to see to what extent optical phenomena give an adequate expression to this notion.

Die Entwicklung vom Saturnzustand über den Sonnen- und Mondzustand hat die vier Elemente Wärme, Gas, Flüssiges und Festes hervorgebracht. In jedem der drei erst genannten Zustände wurde das dem folgenden Zustand entsprechende neue Element keimhaft angelegt. Deutet sich schon jetzt, nachdem wir die Mitte des Zustandes «Erde» überschritten haben, in den physikalischen Erscheinungen des Festen, d.h. des Gestalteten, auch hier ein neues – fünftes – Element an, das erst später Grundlage unseres Daseins sein wird?

Zur Phänomenologie der Wärme

Friedrich-Wilhelm Dustmann

With reference to Martin Basfeld’s book “Wärme: Urmaterie und Ich-Leib”, this article seeks critically to examine concepts of heat theory, including early suggestions by Goethean scientists (E. Hegelmann, G. Unger), and to rethink them from a phenomenological point of view. As regards an extensive quantity of heat or heat content, it is clear that the concept of entropy has, beyond all statistical interpretations and derivations, a central importance that can be reliably confirmed by direct observation. From this it should be noted that heat content is not a constant quantity and thus it creates special difficulties for its measurement.

