

der «Elementeumwandlungen» zur Anschauung gebracht werden könnten», nicht in einen sinnvollen Zusammenhang mit den Ergebnissen der vorliegenden Untersuchung gebracht werden.

In diesem Zusammenhang bin ich mit J. Wirz auch völlig einverstanden, «daß es nicht genügt, allein zu einer Wiederholung der Experimente mit größerem technischen und personellem Aufwand aufzurufen». Es ist mir allerdings rätselhaft, wie man bei sorgfältiger Lektüre zu dem Schluß kommen kann, daß ein solcher Aufruf in meinem Text enthalten sein soll.

Des weiteren mißversteht J. Wirz die begriffliche Ausdifferenzierung der genauen Fragestellung, in welcher der für die Untersuchung notwendige Realitätsbegriff entwickelt wird, als eine «Anerkennung der Existenz «nicht-klassischer Gewichtsveränderungen», welche «außerordentlich mit der Achtung und Verehrung der Persönlichkeit Hauschkas zusammenhängt». Es ist mir unerfindlich, wie man bei genauem Textstudium zu solch einer grotesken Fehlinterpretation gelangen kann. Zusammenfassend gesehen läßt sich festhalten, daß jede Untersuchung unbefriedigend erscheinen muß, wenn sie von einem nicht-immanenten Standpunkt her beurteilt wird.

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*Kohlrausch, F.* (1986): Praktische Physik. Stuttgart (23. Auflage). 1. Band.

*Sachs, L.* (1992): Angewandte Statistik. Berlin (7. Auflage). 1. Band.

*Wirz, J.* (1992): Kritische Anmerkungen zu den Ausführungen Stephan Baumgartners über Hauschkas Wägeversuche. Elemente d. N. 56, Heft 1 S. 91-94.

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A short notice of the RIVM try-out workshop

## Values assessment in environment and landscape research – a meeting with the goethean approach<sup>1</sup>

### *Introduction*

On several occasions during our work at the National Institute of Public Health and Environmental Protection (RIVM) we met colleagues from different disciplines phrasing in one way or the other, the urgent demand for an integrative, holistic, interdisciplinary approach that would make sense for the policy makers, as well as for the public. An approach that should nevertheless, at the same time, be and remain acceptable for the scientists involved.

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<sup>1</sup> This conference was held on January 15/16, 1993 in «De Biltse Hoek», Bilthoven, NL.

Based on experiences with colleagues working in the goethean school of natural sciences, also indicated as phenomenology (the logic of the phenomena), we thought that their version of holistical science might be an interesting addition to the mathematic modelling approach.

In one of such conversations, the idea was born to make a workshop trying out what the eventual benefit of such an additional approach could be.

### *Motive of the workshop*

In an ongoing effort to come to grips with the complex management problems of environment and nature, there is an increasing demand on holistic approaches to complement the reductionist approach (i.a. multistress, sum-parameters). This demand is particularly urgent for all those in charge of public interest, like, for example governmental organisations (ministries and their research institutions). For specialists in most branches of research such questions are less urgent as they can focus on fundamental aspects within the framework of their discipline. However, when inter-disciplinary research is at stake, the question on how to handle and eventually master the problem of complexity is as urgent as mentioned before.

Within the school of goethean science quite some experience on holistic approaches, especially in the field of biology and ecology has been collected and generated. However, a pragmatic applicability of that approach was not too clearly demonstrated as yet.

Therefore, a discussion on this matter between representatives of both groups seemed worthwhile, in order to assess possibilities for cooperation and mutual enrichment.

### *Meeting in the workshop*

On 15-16 January 1993, a try-out workshop was organised by the RIVM (Laboratory of Ecotoxicology). During three sessions, 18 participants from 12 institutions in Switzerland, Germany and the Netherlands, had intensive discussions on possible cooperation between environmental, landuse and planning scientists and research-managers from different backgrounds. Starting point was the demand for integrative, holistic, interdisciplinary approaches and the phenomenological approach, goethean style, as developed by friends and colleagues from abroad.

The purpose of this workshop was a mutual introduction of questions and perspectives, to find out in which way and on which subjects participants could cooperate. To make this clear the institutional partners were invited to formulate some crucial questions, whereas the goethean scientists represented by Bockemühl, Schad, Vahle and Seiberth were invited to present<sup>2</sup> their approaches and experiences as potential ways to answer the questions. Obviously, thorough discussions on how to understand the

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<sup>2</sup> The proceedings of the workshop with these contributions, are published as official RIVM-report. Revised versions of the papers presented by Bockemühl and Schad are published in this issue, too. The contribution of Vahle, «*Die Idee der Kulturlandschaft*», was published in *Die Drei*, Nr. 7/8, 1991.