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67

Hans R. Jenemann

Über die Aufhänge- und Anzeigevorrichtung der ägyptischen Waage der Pharaonenzeit

Summary: A number of different and partly contradictory interpretations about the suspension and the indicator system of the ancient Egyptian balance has been given so far. In this article previous explanations of these devices are presented and critically considered; at the same time the balance of the Egyptians is included in the complete evolution of this instrument. Based on original Egyptian colour drawings on papyrus taken from the *Book of the Dead* and considering weighing techniques, it is stated that all interpretations given so far are not capable of providing a satisfactory explanation of the function of these devices.

The interpretation given already in 1888 by Sir Flinders Petrie comes closest to the real function of the indicator system: According to his assumption the device consisted of a solid pointer attached to the beam, in relation to which a plumbline was observed after the oscillations had stopped. This interpretation, however, has to be varied or to be complemented by taking into consideration the special drawing technique of the ancient Egyptians: Processes were drawn in a reproduction technique which consisted in the simultaneous combination of a top view and a side view. A new hypotheses about the function of the suspension and the indicator system of the ancient Egyptian balance is presented, which has the advantage of agreeing completely with the Egyptian drawing technique and which, in addition, ensures optimum precision of the weighing procedure.

Schlüsselwörter: Ägyptische Waage, Psychostasie, Totenpappi, Waage (ägyptische), Wägetechnik, Zeichentechnik (ägyptische), XV/XIV Jh. v. Chr.

1 Einführung

Die alten Ägypter haben schon frühzeitig Wägungen ausgeführt. Auf vielen bildlichen Darstellungen an Wänden von Grabkammern, die aus der Zeit ab etwa 2500 v. Chr. bis ans Ende der altägyptischen Kultur stammen, begegnet uns immer die gleichartige Waage als der Grundtypus, der auch heute den meisten unter dem Begriff Waage geläufig ist – und wohl bereits auf prähistorische Zeiten zurückgeht¹. Dabei handelt es sich durchweg um ziemlich groß dimensionierte, teilweise mannshohe Waagen. Sie bestanden aus Holz, so daß von ihnen keine Reste erhalten sind. Andererseits lassen rudimentäre Fundstücke aus späterer Zeit, jedoch unbekannter Datierung und Herkunft erkennen, daß auch kleinere Waagen mit kürzeren Balken benutzt wurden².

Waagen sind jedoch nicht nur aus Darstellungen des Handelsverkehrs bekannt, sie begegnen uns auf vielen Abbildungen aus dem Bereich des Totenkultes. Gelegentlich wurde vermutet, daß die ägyptischen Zeichner sich zur Darstellung des Totengerichtes eine spezielle Waage ausgedacht hätten. Vergleicht man jedoch die Abbildungen aus den Toten-

¹ Verfasser dankt Herrn Erich Robens, Friedrichsdorf, für die über die altägyptische Waage geführten Diskussionen.

Author Jenemann, H.R.

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Remarks