TACIT SKILLS

TEMPORAL EMERGENCE AND KNOWLEDGE "ON THE FLY"

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- ‘The broader historiographic implications of tacit knowledge – not in what it implies *should* be investigated, but in what *cannot* under its aegis – are most problematic and troublesome’ Olesko, Kathryn “Tacit Knowledge and School Formation”

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- Show how the hylomorphic model denies the role of skill in productive activity
- Illustrate a number of areas in which the hylomorphic model fails to account for actual practice
- Take these areas as signposts signaling the proper place to begin an analysis of skilful practice

PRODUCING KNOWLEDGE

- From discovering knowledge to producing knowledge

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- **From discovering knowledge to producing knowledge**

- **The *Production* of knowledge;**
  - Occurs temporally
  - Requires actions

THE HYLOMORPHIC MODEL

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It is difficult to consider the notions of form and matter as innate ideas. However, at the moment when one would be tempted to assign a technological origin to them, one is arrested by the remarkable capacity of generalization which these notions have. It is not only the clay and the brick, the marble and the statue which can be thought according to the hylomorphic model, but also a great number of formal, genetic and compositional actualities, in the living world and the psychic domain. (Simondon, Gilbert)

WHY IS HYLOMORPHISM SO PERVASIVE?

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- **Production understood as *determined primarily from without***

THE ENLIGHTENMENT IDEAL OF METHOD

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- Progress in science and technology depends on *method*

‘We know that the Fleming who was first to invent the telescope was a simple maker of ordinary spectacles who, casually handling lenses of various sorts, happened to look through two at once, one convex and the other concave, and placed at different distances from the eye. In this way he observed the resulting effect and thus discovered the instrument. But I, incited by the news mentioned above, discovered the same thing by means of reasoning’

(Galilei, Galileo “The Assayer” Stillman Drake trans, in Drake, Stillman. *Discoveries and Opinions of Galileo* (New York: Doubleday & Co., 1957), 245)

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Ad hoc solutions can only issue from a particular kind of practitioner – one who is present, situated and engaged

EPISTEMOLOGY WITHOUT A SUBJECT?

- **Subject as distanced, detached and disengaged**

EPISTEMOLOGY WITHOUT A SUBJECT?

- Subject as distanced, detached and disengaged
- Studies of the *Practice* of Scientific Objectivity

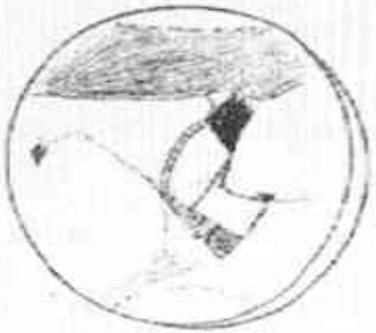
June 14

24-inch λ 277°
power 239 seeing 6
⊙ 163°

18-inch diaph. λ 295°
power 490 ng seeing 4

12-inch diaph. λ 307°
power 490 ng seeing 4

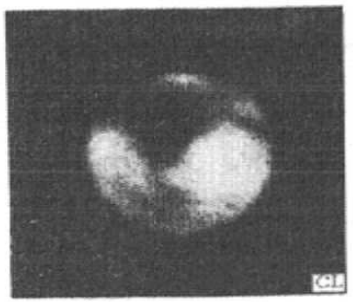
June 15



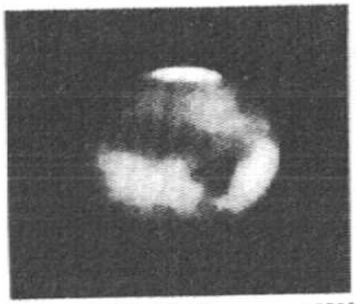
24-inch λ 267°
power 239 seeing 6
B+20°

24-inch λ 283°
power 490 seeing 4

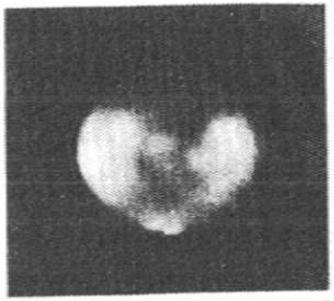
24-inch λ 287°
power 490 seeing 4



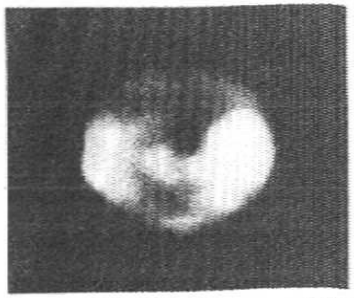
1. 1905 May 12 λ310° Feb. 13 M.D. Y



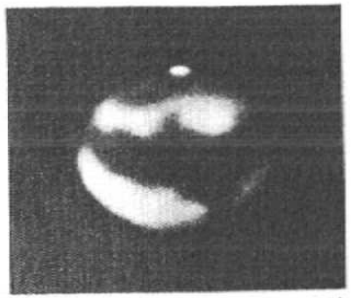
2. 1907 July 3 λ270° U.T. 4:21 Apr 7 M.D. Y



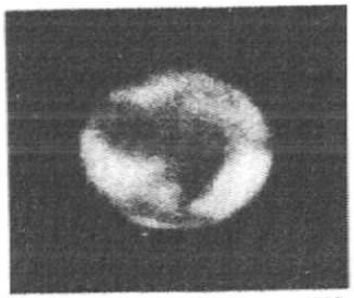
7. 1918 Mar 31 λ284° U.T. 3:34 Dec 25 M.D. Y



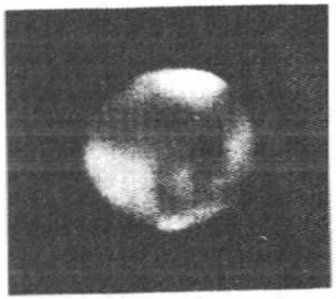
8. 1920 Apr 23 λ285° U.T. 8:47 Jan 25 M.D. Y



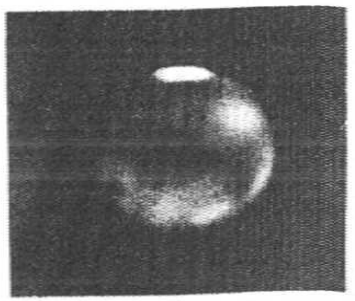
3. 1909 Oct 4 λ270° U.T. 7:08 July 1 M.D. Y



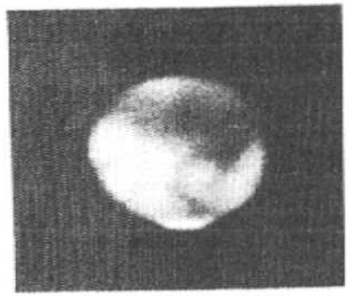
4. 1911 Nov 26 λ275° Aug 27 M.D. Y



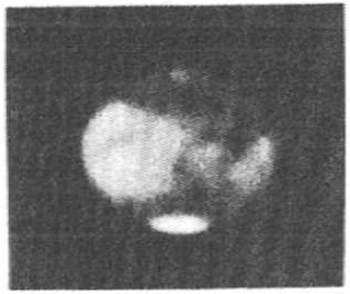
9. 1922 June 18 λ260° U.T. 7:25 Mar 16 M.D Y



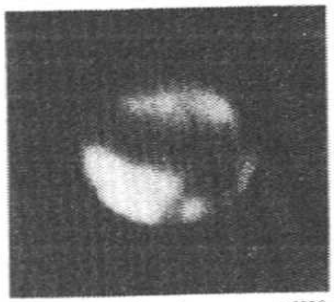
10. 1924 Aug 31 λ253° U.T. 9:34 May 17 M.D. Y



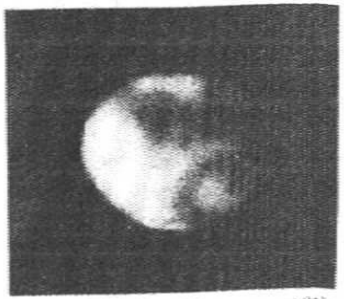
5. 1914 Jan 21 λ254° Oct 9 M.D. Y



6. 1916 Feb 12 λ250° U.T. 4:26 Nov 15 M.D. Y



11. 1926 Nov 6 λ255° U.T. 5:19 Aug 6 M.D R



12. 1928 Dec 29 λ[illegible] Sept 28 M. D. Y

EPISTEMOLOGY WITHOUT A SUBJECT?

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  - ‘the photograph became the emblem for all aspects of non interventionist objectivity…not because the photograph was obviously more faithful to nature than handmade images – many paintings bore a closer resemblance to their subject matter than early photographs – if only because they used color – but because the camera apparently eliminated human agency… Nonintervention – not verisimilitude – lay at the heart of mechanical objectivity, and this is why mechanically produced images of individual objects captured its message best’ Daston and Gallison *Objectivity,* p187

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- **The View from Nowhere**

LIMITATIONS OF THE HYLOMORPHIC MODEL

PREDETERMINATION AND THE PROBLEMS OF TEMPORAL EMERGENCE

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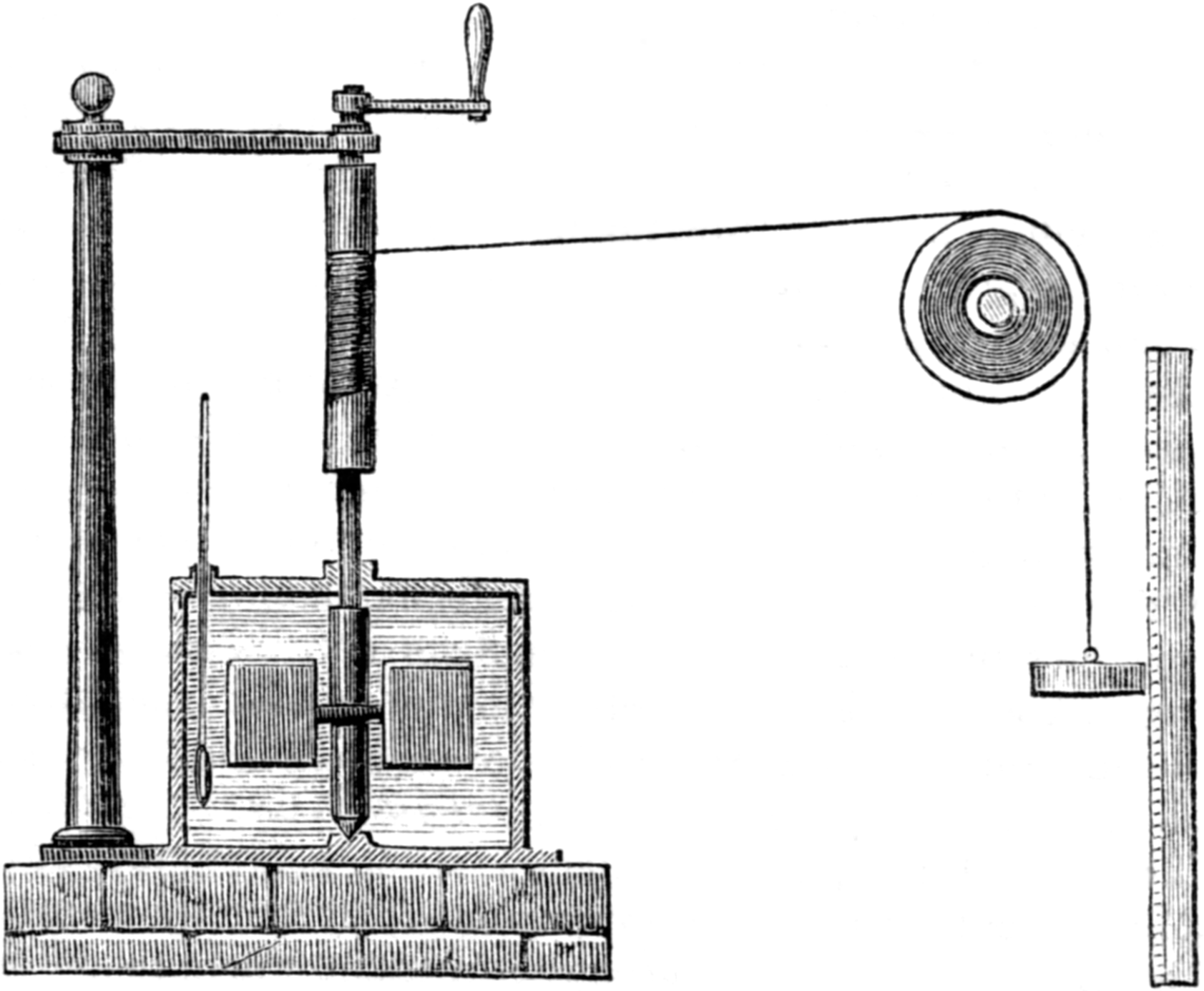

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CONCEALING SKILL

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- **Working to designs**
- **Producing identical objects**

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  - An atemporal account of production
  - Creative activity of the subject understood as independent of the process of production

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- **Features of the model that face problems;**
  - An atemporal account of production
  - Creative activity of the subject understood as independent of the process of production

- **Where we will find skill;**
  - The temporal nature of production
  - The situated nature of the subject

TACIT SKILL AND TEMPORAL EMERGENCE

"THIS PICTURE IS NOT THOUGHT OUT AND DETERMINED BEFOREHAND, RATHER WHILE IT IS BEING MADE IT FOLLOWS THE MOBILITY OF THOUGHT" - PICASSO (GHISELIN, 1954: 49)

THE CENTRAL ANALOGY – CROSSING A RIVER

FROM BLUEPRINTS TO SKETCHES

- Lack of preconceived plan ≠ Lack of intention

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- **The nature of the sketch**

RECOVERING THE SITUATED SUBJECT

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- **Attentive and responsive – situated and engaged**

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- **Metis and the Ancient Greeks**

RECOVERING THE SITUATED SUBJECT

- Attentive and responsive – situated and engaged
- Metis and the Ancient Greeks
- Paracelsus (1493-1541)

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- **New perspectives on the tacit/explicit divide**
  - Tacit - production guided from within
  - Explicit - production guided from without

SOME LIMITATIONS TO THE HYLOMORPHIC MODEL

- Simondon
- Deleuze & Guattari
- Meno problem
- Wittgenstein and the Rule Following Paradox

THE UNCERTAINTY/ SKILL LINK