CHAPTER SIXTEEN

VYGOTSKY ON UNITS AND MICROCOSMS

To study one single thing, one subject, one phenomenon until the end, exhaustively, means to know the world in all its connections.
(Vygotsky 1927)

The idea of an exhaustive study of just one case which characterized Luria’s idiographic science also underlies another approach which stimulated Vygotsky’s methodological reflections. Vygotsky praised Pavlov for his study of just one reflex:

Pavlov is studying the activity of the salivary gland in dogs. What gives him the right to call his experiments the study of the higher nervous activity of animals? Perhaps, he should have verified his experiments on horses, crows, etc., on all, or at least the majority of animals, in order to have the right to draw these conclusions? Or, perhaps, he should have called his experiments ‘a study of salivation in dogs’? But it is precisely the salivation of dogs per se which Pavlov did not study and his experiments have not for one bit increased our knowledge of dogs as such and of salivation as such. In the dogs he did not study the dog, but an animal in general, and in salivation a reflex in general,…his conclusions do not just concern all animals, but the whole of biology as well. The established fact that Pavlov’s dogs salivated to signals given by Pavlov immediately became a general biological principle…Pavlov maximally abstracted the phenomenon he studied from the specific conditions of the particular phenomenon. He brilliantly perceived the general in the particular.
(Vygotsky 1997b: 318)

In contrast to the idiographic approach, which studies one individual in all its concreteness, here the object is a particular process or relation abstracted from everything connected to it. Pavlov saw that the susceptibility of a particular reflex to training offered to science a general principle of biology, now famously known as the conditional1 reflex. The dog’s conditional salivary reflex differs somewhat from

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1 ‘Conditional’ because the reflex is conditional upon the organism’s previous experience, rather than being innate. When Pavlov’s idea was adopted by the American behaviorists, the term became ‘conditioned’ reflex, so ‘conditioning’ took on the connotation of controlling a subject’s behavior.
the concept of Urphänomen, since it remains a particular alongside innumerable other particulars. Nonetheless, it functions in biology as a universal archetype as it readily suggests a model relationship for all living organisms, which is represented in the concept of ‘conditional reflex’.

On the other hand, Vygotsky was sharply critical of Pavlov; in the words of his inaugural speech:

...outside the domain of the elementary and primitive, reflexology was left only with its general bare claim—equally well applicable to all forms of behavior—that they constitute systems of conditional reflexes. But neither the specific details of each system, nor the laws of the combination of conditional reflexes into behavioral systems, nor the very complex interactions and the reflections of some systems on others, were clarified by this general, far too general statement and it did not even prepare the way for the scientific solution of these questions.... [He] reduces everything to a common denominator. And precisely because this principle is too all-embracing and universal it does not yield a direct scientific means for the study of its particular and individual forms. (Vygotsky 1997: 35)

The Reflexologists mistook their concept of the substance\(^2\) of organic life (the reflex) for an explanatory principle of universal scope. The conditional reflex can operate as a ‘unit of analysis’ and explanatory principle along the lines suggested by Goethe, only so long as the scope of the domain is limited in such a way that the conditional reflex remains an empirically verifiable entity. Once ‘everything is a conditional reflex’, the quite concrete concept is transformed into a general principle, independently of its empirical verification. In this form, the idea fails as an explanatory principle, even in a domain where it is applicable. (Vygotsky showed in his 1924 speech that consciousness cannot be a stimulus and consequently the conditional reflex cannot act as an explanatory principle for human behavior.) The reflexologists turned the idea of conditional reflex into an empty abstraction.

However, taking his inspiration from Pavlov’s idea, Vygotsky developed the idea of microcosm. Vygotsky referred back to his study of Hamlet in his University days for “The Psychology of Art,” in which he tried to “deduce the laws of the psychology of art on the basis of the

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\(^2\) By ‘substance’ is meant the conception of the underlying reality of the science. The concept of substance will be dealt with in greater detail in chapter 18.