FORM AESTHETICS: INTRODUCTION

1 WHAT IS A FORM?

The concept of form has been of central importance in philosophical and scientific reflection since its beginnings. One thinks, for example, of the Ionian physicists and their hypothesis that many aspects of the world depend on the form of atoms. Similarly, innumerable variations on Plato’s world of ideas/forms and Aristotle’s dialectic of matter/form have characterized Western thought throughout its history. Of universal currency is Galileo’s thesis that the book of nature is written in the language of the geometric forms, and that it is only necessary to learn how to read it. The various theories of form that have been developed in the twenty-five centuries of Western civilization instruct us that there is no single or fundamental theory of forms. The problem thus becomes one of those theoretical cruxes that enable us to understand the meaning and deeper-lying characteristics of a theory. A book about form, therefore, may pursue the purely theoretical purpose of developing an aesthetics of knowledge, in the sense of analysis of the forms that emerge qualitatively from the physical level.

Moreover, the development of research connected with artificial intelligence and the cognitive sciences obliges us to confront further components of the traditional problem of form and to ask ourselves once again: ‘What is a form?’ Among the answers now forthcoming to this question, some seem irritatingly traditional: for example, that there exists a world of experience which displays the features of an intuitive physics, more Aristotelian than Galilean, and that the procedures of semantic categorization employed by natural language are more closely connected to perception than we would have been willing to admit even only a few years ago.

These answers refer to concepts of form which assume a perceptive and phenomenological nature, and they thus recover the original meaning of scientific traditions that had grown outmoded or had been radically distorted. Indeed, it was Gardner himself, when tracing the history of cognitivism, who asked whether we have truly moved forward from Gestalt psychology and the Würzburg school, or whether in fact we are merely rediscovering what they already knew.¹

I shall examine two cognitive theories that are today generally assumed to be irreconcilable: that of Gibson and that of Gregory.

The supporters of an ecological theory of perception maintain that the same laws of organization operate in both thought and perception, an example being the Gestalt law of field, which would exclude the perception of phases. By contrast, the proponents of a constructivist theory claim that perceptive processes and the processes of thought follow the same inferential logic.

In brief, Gibson’s theory rejects the constructivist point of view and affirms that perception is a direct organization of the available information. Conversely, Gregory argues that perception is the result of our brain’s processing data about a world and that it can be explained in terms of stored mental representations. For Gregory, perception is hypothesis, with the correlated idea that the mind must translate sensory information into a language of the mind.

Both conceptions share the idea that perception proceeds in a single direction from stimuli to meaning, and that massive transformations in sequence are required to break these structures down for analysis. Nevertheless, although the two positions have a large amount of experimental evidence in common, they are apparently incompatible.

And yet, at least in part, the polemic that divides the two theories on the cognitive processes involved in the phases between distal and proximal stimulation could profitably draw on theories developed prior to the 1930s. The theory of production developed by the Graz school, for example, assumed that perceptive aspects and cognitive integrations are connected in the various phases of the presentation. In modern terms, this suggests that the difference between ‘bottom up’ and ‘top down’ in cognitive processes is more a difference of degree than of kind internally to a form – that is, a structure consisting several layers. At issue are the differences between a theory of perception founded on eventualities of presentation and one founded on eventualities of judgement, or in modern terms, between theories of representation that place more or less emphasis on its ‘inner’ or ‘outer’ aspects, as well as the directions taken by information input and output. Moreover, between the presentation and the hypothesis lies the assumption (Annahme), which is a type of act which is not yet a judgement – in the sense of a comparison among several and successive presentations (hypotheses) – but contains a form of immediate conviction deriving from the apprehension of the mode of being (So-Sein) of a physical object. This is an aspect of Meinongian theory which sank into oblivion but which in the last fifteen years has been revived only with regard to logicolinguistic aspects of Meinong’s semantics, whereas it would be much more relevant to the theory of perception in which it originated. An assumption, in simple terms, is a type of intermediate act between presentation and judgement which enables apprehension of an object through awareness of its existence or presence (Vorgegebenheit) and its ordering or structuring into an ‘objective’. The ‘hypotheses’ referred to by Gregory’s theory, and of which it is accused by the Gibsonians – this in effect being the term most frequently used by Gregory himself – are not always hypotheses; on occasion they are outright ‘assumptions’ in Meinong’s sense of the term. For example, in the case of Penrose’s