stream at all, but something which is said to behave like a stream only in some metaphorical sense. Similar difficulties arise if we try to attribute a like objective reality to Space. We can imagine no boundaries to Space; it seems to have no active specific qualities and we have no sense-organ for per- ceiving it.

The thinkers of antiquity saw these difficulties without solving them. Their whole treatment of philosophic problems was objec- tive; and, so long as Space and Time are treated objectively, not much can be done with them. Plato has great difficulty in explaining the relation between Space and his Ideas: Aristotle contents himself with defining space as “ the first unmoved limit of the containing body, ” a definition which helps us very little: nor do we get more light from later Greek philosophy. As to Time, there was always a tendency in Greek thought to treat it as in some sense unreal. Time was seen to be intimately connected with change, and it was just their liability to change that made ordinary mundane things unreal, as contrasted with the unchanging steadfastness of the Platonic Ideas. And the pantheistic One-and-All of Plotinus is plainly incompatible with the reality of Time. In all pantheistic systems Time belongs to mundane existence and Eternity to the transcendent Reality.

Modern philosophy is distinguished from ancient mainly by its greater subjectivity; and thus it was not long after the rise of modern philosophy that thinkers began to turn to the *subjective* method of explaining Space and Time, that is, to regard them as real only to our minds. Its use begins effectively with Berkeley, though prepared for to some extent by earlier writers such as Hobbes. Berkeley’s treatment is most definitely clear in the case of Space; for his attack upon materialism made it necessary for him to affirm the ideality of Space as well as of Matter. But he takes a similar line of argument with Time, declaring it to be nothing but the succession of ideas. The merit of the subjective method was that it made men see the importance of psychology. If Space and Time exist only in the human mind we must analyse the human mind to explain them. The work of the English psychologists such as the Mills and Bain attaches itself to subjectivist principles.

A distinct epoch in the history of the subject was made by the work of Kant, whose solution of the problems may be classed as *transcendental.* He argued that Space and Time are not given by experience, but are rather conditions of all our experience, being in his terminology a priori, that is, supplied by the mind from its own inward resources. They do not belong to things- in-themselves, but to things-as-we-know-them, or phenomena. Their validity consists in. the fact that all men have them and that they are absolutely necessary conditions of human in- telligence. As he expresses it from his peculiar point of view, Space is the form of outer sense, Time of inner sense.

The prevalence of German philosophy in Great Britain during the last quarter of the 19th century has given these Kantian principles a great currency, interrupting the more truly characteristic psychological tendency of British thought. That prevalence is now passing away. No one now holds the full Kantian position; which, in the case of Space, is refuted by the simple consideration that our spatial conceptions depend upon our sensuous perceptive powers; and that, consequently, the spatial conceptions of the blind, for example, are quite different from those of ordinary men. If Kant is right, and Space is a pure form unaffected by all specific differences of content,\* it would follow that a man born with one sense only, say that of taste, would have the same space-conception as the rest of us; a conclusion too plainly absurd to need refutation. What an apriorist can still maintain is that in our conception of Space and Time there are elements which cannot be explained by the psychologist as having developed out of anything else, and must therefore be regarded as innate endowments of the mind. This is a position not unreasonable in itself, and one, at least, which does not interfere with the detailed work of the psychologist.

The way with these problems which commends itself to the present writer and seems fully in harmony with the general tone of contemporary thinking may, if a distinctive catchword be desired, be termed the *humanist* method. By this is meant that the study of the human mind comes first; that we put no metaphysical questions till we have learnt what the psychologist has to teach us; and that in our explanations of meta­physical realities we should be as anthropomorphic as possible. In the case of Space this leads to a result which is largely nega­tive. When we ask what objective reality corresponds to our conception of Space, the answer must be analogous to that which we give respecting the various sensible qualities of the external world. We cannot suppose that Colour, for example, exists objectively as we experience it; evidently it is altogether relative to the organs of vision which we happen to possess. But we must believe that the objective world has a quality in some way correspondent to the quality of Colour. So with Space. Space as we know it is altogether relative to our tactual muscular and visual powers of perception. But the fact that our spatial perceptions and conceptions enable us to deal suc­cessfully with objects requires us to believe that the objective· world has an arrangement of its own corresponding in some way to spatial arrangement, though we are unable to imagine what it can be. Space cannot be objectively real, because of the. difficulties disclosed above in the criticism of the “ objective” method, and we are unable to put anything definite in its place. With Time the case is somewhat different. Our conception of Time is based on our experience of Change, combined with memory and anticipation. Now Change is an experience which we feel directly in our personal consciousness: consciousness is not spatial, but it is mutable. This direct experience is a. guarantee of the realness of Change, and justifies us in attri­buting it in some degree to ultimate objective reality.

See S. H. Hodgson, *Space and Time;* H. Bergson, *Essai sur les données immédiates de la conscience;* J. E. MacTaggart, *Studies in the Hegelian Dialectic.* **(H.** St.)

**SPADE,** a tool for digging and loosening the soil; together with the fork it forms one of the chief implements wielded by the hand in agriculture and horticulture. Its typical shape is a broad flat blade of iron with a sharp lower edge, straight or curved, the upper edge on either side of the handle affording space for the foot of the digger, which drives it into the ground; the wooden handle terminates in a cross-piece, usually forming a kind of loop for the hand. The word in O.Eng. is *spaedu,* cognate forms being Du., Swed. and Dan. *spade,* Ger. *Spaten;* it is derived from the Gr. *σπάθη,* a broad blade of wood or metal, and so used of the blade of an oar or sword. This was latinized as. *spatha,* and used of a broad paddle for stirring liquid, of a piece of wood used by weavers for driving home the woof, and particularly of a broad two-edged sword without a point. The Spanish playing cards had “ swords ” for the suit which we∙ know as “ spades,” and the suit was called *espada* (see Cards, Playing).

**SPAGNA, LO** (d. *-c.* 1529), the usual designation (due to his Spanish origin) of the Italian painter Giovanni di Pietro, one of the chief followers of Perugino. The famous “ Sposalizio ”— marriage of Joseph and Mary—in the Caen museum, formerly attributed to Perugino *(q.v.),* is now credited to Lo Spagna. Nothing whatever is known of his early life, or how he became a member of the Perugian school. There is a marked absence of individuality about his style, which seems like an imitation of the earliest manner of Raphael and that of Pinturicchio in a weaker and less virile form. The chief of his numerous panel paintings are the “ Nativity,” in the Vatican, and the “ Adoration of the Magi,” at Berlin. In 1510 Lo Spagna executed many frescoes at Todi, and in 1512 several other mural paintings in and near Trevi. His most important works were frescoes at Assisi and Spoleto, of which some exist in good preservation. He received the freedom of the city of Spoleto in 1516, as a. reward for his work there. Lo Spagna's frescoes reach a much higher standard of merit than his panel pictures. The museum of the Capitol in Rome now possesses a very beautiful series of life-sized fresco figures by him, representing Apollo and the.