Loskij's article is a plea for Realism. It seems singularlny alve to us, since he has evidently not heard of the English and American movement in this direction that has been going on for so long now. It is more ourious that he does not seem to know of Meinong and his school. He says that the relation of subject and predicate is one of ground and consequent, and is always necessary. In judgments of preception like 'This rose is red,' based on analysing a perceived complex, we do not see the necessity because we fail to see all the intermediate links which are apparently infinite in number. As this makes all propositions necessary and as he does not tell us what he means by that word, these results We are also told that, since logical laws need not greatly disturb us are laws of the object, and since thought merely recognises them, thought cannot go wrong. It is only the substitution of 'lancy' for it that leads to error. Unfortunately no explanation is offered of why we fancy that fancy is thought in such case.

Finally it is my unpleasant duty to express surprise that an article so offensive in tone as Croce's was included in this book without emendation. No one is under any obligation to read or understand symbolic logic, but, if he cannot do so, he should speak with modesty of distinguished workers in another sphere. To present in a patronising way a travesty of the methods and results of such men as Frege, Peano, and Russell; to refer to them de haut en bas as 'deserving authors'; and to congratulate oneself on the habit of a 'decent and comprehensible' mode of expression; —these impertinences can only cover a writer with deserved ridicule, and are singularly tactless in view of the logical leanings of at least three of the other contributors.

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Proceedings of the Aristotelian Society, 1912-13. Williams & Norgate. Pp. 375.

The thirteenth volume of the new series of *Proceedings* of this Society opens with a paper on the "Notion of Cause," by Mr. Russell. Bergson comes in for a full share of discussion, points in his philosophy being treated by Miss Costelloe ("What Bergson Means by 'Interpenetration'"), Miss Stebbing ("The Notion of Truth in Bergson's *Theory of Knowledge*"), and Prof. Robinson ("Memory and Consciousness"). There are two papers on volution: "The Nature of Willing," by Dr. Dawes Hicks, and "The Analysis of Volition," by Prof. Hoernlé. Prof. Hoernlé also contributes to a symposium together with Prof. Stout and Mr. Barker on the question: Can there be anything Obscure or Implicit in a Mental State? Miss Jones deals with Dr. Mercier's Logic, Dr. Wolf with the Philosophy of Probability; and there are papers on "Purpose and Evolution," by Mr. Lynch, on "Intuitional Thinking," by Prof. Granger, and on "Kant's Transcendental Æsthetic," by Mr. Carlile. There is also a short abstract of a paper by Prof. Jacks on "Does Consciousness Evolve?"

Mr. Russell's paper severely criticises the current notions held by philosophers as to what scientists mean by the Law of Causation. He points out that necessity has a special reference to propositions considered as values of propositional function which are true for all permissible values of some variable. He then discusses the difficulties introduced into ordinary notions of causation by recognising (a) that there are no 'next' events, and (b) that to recur an event must be more or less abstract; and points out the many errors that have sprung from assimilating causation to human volition. What the advanced sciences use are functional interrelations, where there is neither cause nor effect in the old sense of those terms. When we are clear about what is meant by determination (viz. functional correlation) we see that the future determines the past as much as the past the future, that a system may have many different sets of determinants, and therefore that even if the world be completely determined mechanically this is no proof that it is not also completely determined teleologically. Laws are rendered probable by experienced agreement with them apart from any prior assumption that Nature is uniform, but if you take absolute time as itself a determinant any system will be deterministic. Actually scientific laws only involve intervals of time; but at every moment an infinity of previously possible laws are disproved, and the laws of science are merely the simplest of the laws which fit the observed facts up to the present, so that there is no guarantee that they themselves will not be shown by experience to be too simple.

Dr. Wolf's paper deals with somewhat similar subjects to Mr. Russell's. He holds that probability has little meaning for a purely indeterminist world, rather more for a purely determinist one, and most for a world that is a mixture of the two. This last possibility is the one in which common sense inclines to believe. Dr. Wolf admits the difficulty of conceiving a completely indeterminist world, and it seems to me that he himself has fallen into a confusion about it. Clearly it means (and he intends it to mean) a world where there are no laws, not merely one where we do not know or suppose there to be any. He denies that in such a world the fact that we had always found A and B together would be any ground for expecting to find them together again. This seems to me false. All that is implied by saying that the world is completely indeterministic is that there are no laws in it. This means that All A's are B's is false. If this be one of our data (i.e. if we are supposed to know that the world is indeterministic) this will be no ground against our concluding from our experience that probably a large percentage of A's are B's, and therefore that it is more likely than not that any A found will be a B. And if we do not know that the world is indeterministic it may be true that our results make it probable that all A's are B's. This proposition will be false indeed, but on given data a false proposition may be more probable than a true one.

The symposium is on a singularly interesting and difficult subject. Mr. Barker argues that it is a priori impossible that there should be distinct elements in an object of consciousness which are not recognised as dis-He therefore concludes that the notion of 'implicit' in such a tinct. connexion is a fiction. The notion of obscurity, on the other hand, has a meaning, but it refers to the cognitive value of the psychological object, not to any intrinsic quality of it. Prof. Stout simply rejects the a priori impossibility and then produces facts which he thinks can be explained by assuming implicit elements and not otherwise. Prof Hoernlé contents himself with pointing out certain ambiguities in the phraseology of Messrs. Barker and Stout, and referring his hearers to Mitcheli's Structure and Growth of the Mind for further information. On the merits of the controversy it seems to me that Prof. Stout is clearly right and Mr. Barker wrong about Stumpf's argument, which I am sure Mr Barker misunderstood. But I think that in this matter it is important to draw a distinction between what I may call 'characteristics' and genuine elements. It is obviously true that you can be aware of a musical note at times when you are not aware that it is analysable into pitch, quality, and intensity; but these are characteristics, not parts, and it is certainly less clear that you can be said to have been aware of genuine parts of a whole when you did not distinguish them Still Prof. Stout

NEW BOOKS.

brings forward strong arguments even for the latter possibility, though they do not seems to me conclusive For instance, the fact that a plot of grass looks different from a piece of green wood though you do not dustinguish the separate blades does not surely prove that you really perceive the separate blades. Would the facts not be equally explained by saying that we had learnt by experience that visual objects of a certain quality were always connected with physical things which under more favourable circumstances cause the perception of visual objects in which parts are actually perceived ? Then such appearances would be connected by association with a judgment that they represented wholes with distinct parts, whilst others (like that due to the green piece of wood) would not. And in general I do not see that the fact that when a sensation is attended to it is not felt to be something quite new is a proof that it was actually present before It is clear that you cannot strictly perceive that newness or oldness of a sensation, but must judge it This judgment may be based on an actual comparison, but it clearly is not usually, and, least of all, in the cases with which Prof Stout deals here. Here it eems to me to be rather based on a felt quality of the present perception, and this felt quality certainly gives no proof that the judgment which accompanies it is true.

A word of praise is due to Miss Costelloe's article, which is one of the best expositions of Bergson that I have seen. She is greatly helped by knowing much more about the mathematical views of the continuum which Bergson attacks than that author himself or most of his commentators. Interpenetration, she says, means that none of the parts of a whole would be the same if they were parts of any other whole. This however would not prove, as Bergson thinks, that the parts of interpenetrating wholes cannot be classified, unless all resemblance by reduced to identity in difference. Whilst I agree with Miss Costelloe that there is a relation of resemblance as distinct from identity in differonce, I think she overlooks a distinction, which, if recognised, would enable her to grant the possibility of classification for the parts of interpenetrating wholes even on the identity-in-difference theory. She takes the identity as that of an element whilst most people take it as that of a quality. I see no reason whatever why the parts of interpenetrating wholes should not be instances of many common universals. Miss Costelloe's objection to the mathematical theory of the continuum is not that it is inconsistent, nor that it is possible to state in conceptual terms any other account of what you mean by a continuum, but simply that you can see that it does not genuinely analyse the continua of which you are directly aware. In one sense I agree; the mathematical account of motion no more describes the object of the perception of motion than does the physical theory of light describe what you perceive when you see a colour. But, on the other hand, it seems to me that the mathematical and physical theories tell us about much more important facts in reality than perceived motion and colour. The latter are only of importance as indications of the presence of what the theories do describe accurately.

I have no space to criticise the remaining articles, many of which are of interest. I can only regretfully notice that Mr. Carlile, like so many other philosophers from Lotze downwards, has been led astray about non-Euclidean geometry by Helmholtz's most unfortunately-worded article.

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