can doubt that the stock of knowledge possessed by the human race at large is rapidly increasing, and will continue to do so. But in the second we meet with several difficulties. If, as Dr. Paul Carus says, metaphysics is "a disease of philosophy" and devoid of value, its decreased influence in the world of thought would seem to indicate a progress of the human mind in the direction of healthy and fruitful activities. But the fact that all science presupposes certain metaphysical concepts,— as that of the trustworthiness of the instinct which attributes objectivity to phenomena cognized by the senses,— would seem to belie the dictum of the great monist; and, as the abstract notions of metaphysics are much farther removed from sub-human psychological conditions than are the concrete ones of natural science, the disuse of metaphysics would appear from an evolutionary standpoint to be, like the atrophy of the religious sense, an indication of retrograde development. Nevertheless, the widely diffused intellectual activity of the present, in which even metaphysics is represented by a greater number of schools than ever before, and which, for the first time in the history of the world, has a broad basis of scientific facts, cannot but tend towards a still higher intellectual condition. One of the most important steps in this direction will surely be a synthesis of the now comparatively isolated departments and schools of human knowledge and thought.

No factor is more promising than the new scientific theories of education; which ought of themselves, when their application has become more general, to develop within a few generations a new and superior type of mind.

No theory about the psychological future of mankind can afford to ignore the strange possibilities opened up by the science of hypnotism. This is a most fruitful field of speculation. We live in a period of esthetic decadence; but neither can esthetic development be left out of account. The esthetic faculty contributes more than any other to individual happiness, and it may be capable of being brought by systematic cultivation to a degree of perfection hitherto unknown.

To sum up, it would seem that there is an undoubted material progress under way, from which wonderful and startling results are to be anticipated, but which will not, unless accompanied by a great intellectual decadence, terminate, as Dr. Shufeldt predicts, in a total destruction of the forests, or, indeed, of any portion of the flora or fauna of the globe which has even a picturesque or decorative value. The wide-spread idea that the development of material resources is all there is of progress, is both an effect and a cause of a temporary tendency to physical, social, and psychological retrogression.

Neither our senses nor our memories are as acute as those of our barbarian ancestors; our taste and capacity for intellectual speculation is not as great as was possessed by our predecessors of the scholastic period, or by the south Asiatic Aryans of any historic time; the ideals of strength and intensity embodied in the Niebelungenlied, those of delicacy and grace which gave rise to the Arthurian legends, and those of divine love and beauty which inspired the Old Masters, have alike become dim and distant to us; and the low vice of avarice rules the day.

But never before was the sum of human knowledge so vast; never were all questions, physical, social, and psychological, studied so carefully and in so full a light; never was the importance of education, and of right education, so generally recognized and insisted upon; and never has the race seemed so near to that fusion into one great world-nation which is indispensable to a universal distribution of the knowledge and ideas and materials which are now of but local utility.

The tendency of the times is to subordinate man to civilization; but civilization is useless except in so far as it promotes the happiness or personal development of man. If any real improvement is to be accomplished in the race itself, in contradistinction to its material environment, there will evidently be necessary a systematic encouragement of that salutary inequality by which favorable variations are husbanded and a specialization of function in the social organism secured.

I cannot venture, in view of the complexity of the problem, to hazard a prediction even for the next stages of human evolution, to say nothing of the millions of years over which Dr. Shufeldt so gaily gambols. His very dramatic picture of the last man can, however, never be realized in fact unless the expected modification in the human organism shall amount to a radical transformation. It is inconceivable that man should be the last of all living forms to disappear during the process of the earth's cooling. As at present constituted, he would succumb, even with all the appliances of civilization, long before many of the lower species. Most of the latter could, in no supposition, be exterminated by him, and many of them, as the doctor well knows, possess incredible powers of resistance to unfavorable climatic and other conditions.

Speculations regarding so very remote a future are of doubtful utility, especially in view of the daily possibility of one of those celestial casualties familiar to astronomers, such as a collision with a dead sun. I forbear to picture the sublime horrors of such an event, but they may at any moment be realized, though with such rapidity that before any human mind could guess the truth the whole solar system would have been dissolved, by the heat resulting from the impact, into invisible vapor.

MERWIN MARIE SNELL.

Washington, D.C., Oct. 26.

Government Science.

THE communication of Eugene Murray Aaron in the issue of *Science* for Oct. 23, under the above heading, contains statements and presents conclusions which I believe to be well founded. Like that writer, I am warmly in favor of the recent reforms in the methods of filling vacancies in the various departments of the civil service, in positions where technical and scientific knowledge is not required. But I am firmly of the opinion that if the heads of scientific bureaus were allowed to select their assistants, subject of course to the approval of the Civil Service Commission, far better results would be secured.

An instance was recently reported to me similar to the case cited by Mr. Aaron. A Washington daily contained the announcement of a vacancy in a subordinate position requiring special scientific attainment. A few young men, hanging around Washington for something to turn up, saw the advertisement as soon as it appeared, and at once placed themselves under instruction to "cram" for the examination. The one of their number who showed the highest average secured the position.

A man far more competent to fill it, residing many miles from Washington, was urged by friends to make application. His letter of inquiry was received too late, and thus a tyro was appointed when an expert might have been secured, to the expressed disgust of eminent scientists in government employ. C.

Highlands, N.C., Oct. 30.

Words of Algonkian Origin.

The Chinook jargon, that *lingua franca* of the region of the Columbia, has recruited its vocabulary from many different sources. Amongst others the Algonkian tongues have contributed their share towards the formation of this linguistic mosaic.

In the "Partial Vocabulary of the Chinook Jargon," given in 1863, by Theodore Winthrop (Canoe and Saddle, Boston, 1863. New ed., Peterson, Edinburgh, 1883, pp. 211–214), we find the following words of Algonkian origin:

Kinni-kinnik, = smoking-weed,
Tatoosh, = milk, cheese, butter.
Wapato, = potato.

The word *moos-moos*, "beef," "cattle," which also occurs, is probably not Algonkian. It occurs in a vocabulary of the "Chenook" of Fort Vancouver, and the "Calapooa," collected before the year 1840, by the Rev. Samuel Parker (see Journal of an Exploring Tour beyond the Rocky Mountains, Ithaca, 1840, pp. 393, 398).

George Gibbs, in his "Dictionary of the Chinook Jargon, or Trade Language of Oregon" (Smithson. Miscell. Coll. 161, Washington, 1863. pp. xiv., 44), attributes a Cree origin to two, and a Chippeway origin to one, of the 490 words of which the jargon was then composed. These words, regarding which he observes: "The introduction of the Cree and Chippeway words is of course