

# THE SCIENCE NEWS-LETTER

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## HUMAN NATURE AND WAR

by

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Of the Four Horsemen described in the Apocalypse, science gives us high hope that at least two can be unhorsed. By our increasing medical knowledge we are gradually ridding the world of Pestilence. And there is reason to believe that science will rid the world of Famine. But with regard to War there are many who assert that science offers no hope whatever; that it indeed closes the door of hope and leaves us to despair.

For war, it is said, springs from human nature; and it will continue as long as our unchanging human nature lasts.

Those who declare that war comes from human nature, and that human nature does not change, have weighty evidence in their favor. Wars have occurred since the remotest time of history. Wars doubtless were waged long before history began. Fighting reaches still farther back, into the animal world, where it is frequent and wide-spread. Thus all the momentum of our animal and human inheritance would seem to carry us fatally forward along the ways of war. Humanity seems pugnacious in its very nerve and muscle; man, it would appear, is born to battle as the sparks fly upward. Human nature, through all the ages, reveals certain constant qualities, and whatever may be the strong desire for another order of life, so it would seem, no other order may be expected.

And yet institutions based upon permanent traits of human character have been torn down and swept away, and without destroying or even weakening a single one of these lasting traits of our nature.

Let us go back, not to the cave-man, but to comparatively recent times in America, Asia and Africa, where it was customary to sacrifice living men to the gods. Sometimes these sacrifices were of the worshipper's own children; for by offering something still more precious than war prisoners - more precious both to the worshipper and the god - it was thought that the divine wrath could be appeased.

We may imagine the opposition when it was proposed to do away with this ghastly institution. "What!" it must have said. "Do you expect us to surrender our very religion - to refuse to our god the rarest, the most valued things we have?" But in spite of such misgivings, human sacrifice was abolished from all lands, and without altering a single one of the deep motives which supported it.

Similarly, blood vengeance once existed almost the world over. The death of a member of one's own family must be avenged, it was felt, by taking a life from the family that caused the death. Even, so mild a statesman as Confucius believed that a lesser official could not live in the same country with one who had killed a high officer of state: that a subordinate must personally see that the death of his superior was avenged.

Yet the institution of private blood-vengeance has been done away with, and without requiring human nature to change by so much as a hair's breadth. We simply have instituted better methods of satisfying the ancient human impulses, while leaving the impulses themselves strong and untouched. In the same way one might speak of piracy and of duelling, which also have been virtually abolished while human nature remains unchanged.

But I hasten on to slavery, which comes closer to us, and whose abolition is within the memory of men who still live. Slavery's hold is from earliest times. The enslavement of others has marked the leading peoples of the world. Civilization itself has seemed impossible without it. Only yesterday the living bodies of men and women were bought and sold even in our own land.

But when the time came for Lincoln to sign the great Proclamation, did he by one jot or tittle have to annul the laws of human nature itself? No. He left men, as before, to be avaricious still. They still are ready to use other men for their own interests. But men have been prohibited from buying and selling men as one buys cattle.

Now is war, in its relation to human nature, essentially different from these other forms of social behavior which have disappeared? War unquestionably is one of the modes in which our nature finds expression. So deep are war's foundations, so firm its iron hold, that all thoughtful men will have at times almost some touch of despair that there can be success against it.

And yet despair is not scientifically justified. Confidence of success here can be had without forgetting or distorting human nature. Hope can be held without shutting one's eyes to the plain facts of psychology. It may well be true that in all its large outline human nature does not change. And yet our experience shows that our unchanging nature permits important changes in human conduct. Indeed, under the stimulation of social enterprise, human nature not only permits but demands profound changes.

We cannot doubt that humanity will keep the great impulses which still lead to war, - among which are the love of wealth, the love of adventure, the love of honor, the love of Mother Country. Yet there can be a growing impatience, a growing abhorrence of satisfying these great impulses by the old bloody methods. Nor is there in the science of psychology anything to assure us that in this one region no further advance is possible; to assure us that here men have reached the last limit of their inventiveness; that they can institute no shrewder, no more satisfying devices to express their devotion to their own nation's life and to the life of the world.

Within wide limits human nature does not change. Yet we are wholly wrong if we suppose that, for the end we here have in mind, it needs to change. Great things have been done for humanity while human nature has remained the same. Our civilization has been rid of human sacrifice in religion, of private blood-vengeance in

our civil life, of piracy upon the high seas, of slavery in all our leading communities. Every one of these social institutions has had the support of men's permanent passions, of men's deep impulses. To rid the world of these ancient instruments it has not been necessary to rid the world of men. Nor have we needed to wait until all sinners have been changed to saints. It has been necessary merely that men should be socially progressive, inventive, adventurous. Men have had to cooperate with one another untiringly to change the old habits of their life. New ways of justice and law and order have had to be viewed with hospitality, without a too-tenacious clinging to the cruder and less effective ways.

Human nature plays a double role. It runs with the hare and hunts with the hound. It expresses itself by remaining in the old, by reverting to the old. But it expresses itself no less by leaving the old, by moving to the new. It has not stood as a wall against progress. The advance, the untiring search for more effective institutions of justice, for more effective ways of meeting the rival claims of large groups of men, - these changes also are an utterance of our nature. The deepest forces behind human conduct do not merely oppose civilization; they press us to be more and more civilized/ Human nature resists progress; but in all leading lands it also overcomes its own resistance, its inertia and habits, its own conservatism. Out of our human nature have come the motives, the human instruments and leaders, the intelligence, the insistent urging, which have enriched and strengthened our civil life. And these same great forces, psychology in no wise forbids us to expect, will bring the more favored nations to cooperate in establishing a better institution than war to do the work of war. Three of the Four Horsemen and not two only, we may hope will cease to scourge the world.

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#### APRIL METEORS FOLLOW PATH OF HALLEY'S COMET

Nearly half a century will elapse before Halley's comet will again visit the regions of the earth, but if you look to the northeastern sky about the twenty-ninth of April and see some shooting stars, the chances are that you are observing some of the pieces of this famous comet. As these shooting stars, or meteors, come from a point in the constellation of Aquarius, the water bearer, which rises in the east just before the sun, ambitious persons, starting out on pre-breakfast golf-games, before sunrise, have the best chance of seeing them.

Though these meteors seem to move along paths radiating from a point in Aquarius, near the star "eta Aquarii", they are actually moving in parallel orbits. Just as the rails of a track seem to come together in the distance, the perspective effect makes the meteors seem to come from a certain point, which astronomers call the radiant. The meteors always move along the same general path, and when, in April, the earth crosses it, the shooting stars are seen, giving rise to an unusually large number of meteors in a night, or an actual "meteor shower".

The meteors of the April shower, technically known as the "eta Aquarids," have been observed for many years at the same season, and it has been shown by an American astronomer, Dr. Charles P. Olivier, of the Leander McCormick Observatory at the University of Virginia, that the path through which this shower moves corresponds closely with that of Halley's comet. So in these shooting stars, we apparently have some of the material given off by this famous comet hitting the earth's atmosphere, and then, by friction, becoming incandescent.