account for the correlation between parent and offspring in characters subject to fluctuating variation, if such variations are not transmitted. In reply to this I wish to say, that *I do account* for this by the assumption of hereditary transmission: however, such cases should be carefully ascertained, preferably by experiment, in order to remove all reasonable doubt as to the fact of the reappearance, in the offspring, of such fluctuating variations, which appeared first in the parents.

I have expressed the opinion that *normally,* in fluctuating variation, this will not be the case, simply because it is to be assumed that the cause of the fluctuating variation will not persist through many generations, so that any tendency toward inheritance, even if present, will soon be counterbalanced and paralyzed by the opposite tendency of variation. Permanent, hereditary variations are only to be expected if the variation of the environment keeps on in the same direction, that is to say, when it ceases to be a "fluctuation," and becomes a "mutation" (in von Waagen's sense).

Recently, Dr. D. T. MacDougal[2] has proposed to settle the question of "inheritance of acquired characters" by experiment, and, *by restoring at the end of the experiment the original conditions,* he intends to show "whether the changes in question are irreversible or not." However, I do not think that the "inheritance of acquired characters" will be disproved, when the effect of the changed conditions "finally disappears, when the inciting causes are removed." Indeed, *this should be the case.* MacDougal hints at the existence of examples, in which the "effect endures for a few generations," and this is all we reasonably may expect under such conditions; and if the experiment has been made on scientific lines, we are fully justified to quote such cases in support of the "inheritance of acquired characters."

MacDougal (p. 122) finds that the phrase "inheritance of acquired characters" is so vague that he has difficulties in properly defining it. But the conditional definition he gives, that it might mean "that an organism makes *adaptive*[3] response to its environment . . . and that the continuance of the stimulus . . . results in heritable and *irreversible*[3] modifications" is surely incorrect. To my knowledge, none of the advocates of the theory of the "inheritance of acquired characters," in its modern form, ever expressed the opinion that the responses of an organism to the environment are always "adaptive," or that they are "irreversible," when transmitted. The phrase "inheritance of acquired characters" does not need any special definition, since it means exactly what the words say, and since none of the words has an ambiguous meaning, preeminently so in its application to biology.

A. E. Ortmann

Carnegie Museum,
Pittsburg, Pa.,
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[2] Science, January 24, 1908, p. 123.

[3] The italics are mine.

TO REDUCE SEASICKNESS TO A MINIMUM

Reduce the system to an alkaline condition. This must be done under the advice of a physician. The urine must be tested two or three weeks before going on board ship. The normal urinary acidity is from thirty to forty degrees. If below thirty, the acid is not eliminated. If above forty, the kidneys are not carrying away all that is in the system. In either case it should be reduced by giving saline waters and antacid treatment. The indican, if any, must also be reduced. Clean out the system thoroughly. Before going on board ship or before the ship leaves the dock, take a strip of soft flannel about six inches wide and three yards long, wrap it around the abdomen and stomach tightly. This will prevent the movement of the internal organs which affect the nervous system. Eat little on board ship and avoid all acids, fruits, salads, beers, wines, etc. Those persons having acid diathesis must not drink lemonade, tea or coffee. Hot water is to be preferred.

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