

together and developed in interesting and telling fashions that affect difficult and useful discoveries. Included will surely be such topics as kin recognition, eusociality, eugenics, infanticide, racism, xenophobia, ontogeny, understandings of directions of selection and mutation, and relations between evolution and culture and sociality, culture and evolution, and, indeed, continuing endless streams of additional useful and still uncompleted topics.

Bill Hamilton was a great thinker, and his loss, as well as that of George C. Williams, were both sadly premature, for their families and their colleagues, and, indeed, for the entire history of the biological and social sciences.

Reverse Reciprocity

One day at the urinal
He chanced to drop a dollar bill.
It wafted down, he sees it yet,
Lying where the floor is wet,
One end doubtful, the other dry,
At first he thought he'd pass it by.
But then some lowly cunning won,
He folded it and passed it on.
And now a doubt forever lingers
For every dollar bill he fingers.

I first recited this poem to Bill Hamilton, author of the concept of inclusive fitness, and the biologist who received the most accolades for his analyses of the complexities of kin helping. Bill Hamilton was a gentle man, as noted, so soft-spoken that audiences to his lectures often did not hear enough to understand what he was saying. On occasion Bill would become so engrossed in his own slides that he would stop talking and stare at them in admiration, and perhaps puzzlement, for long minutes, while the audience sat in stunned silence, turning their heads, rolling their eyes, and lifting their eyebrows. Once, while lecturing in a large auditorium, he told a joke that not even someone in the front row could possibly have heard. Nevertheless, the audience eventually began to chuckle as, facing them, he continued shaking with silent laughter, his hand over his mouth, never looking up, and never managing to utter anything more than a tiny rhythmic wheeze.

Although the above poem is about social reciprocity, not kin helping, I thought Bill might appreciate it. So I recited it for him one day, along with two graduate students who had joined us for lunch. With my first words, Bill began to laugh, almost silently but with uncharacteristic intensity, ducking his head and trying to hold his hand in front of his reddened face. For a long while after I had finished the poem, he remained unable to compose himself; and so did the two startled graduate students.