

CATCHING A RIDE INTO THE FUTURE

*...anonymous men catching a ride into the future
on a vessel more lasting than themselves— Billy
Collins, "Marginalia"*

Maybe, Billy, we should recount this story
about Fermat, a French lawyer by trade—
not really anonymous, as it turned out,
for he caught *quite* a ride—
who wrote mathematics in his law
and math books, with theorem and proof
entered in their margins.
In 1637 he penned a statement—
less innocent than it looks—
placed it squarely within the book's narrow rims
and asserted it to be
the truth.

But in the remaining space he offered:
"Regrettably, to record the proof,
the margin was not wide enough."

More than three hundred years
men sought to find what that margin lacked.
Mathematicians, both closet and not,
produced reams of work: racked their brains
in attempts to forge a proof
of what Fermat had so simply stated.
Vast theories were born from these forays,
and many things discovered, created,
that were never before imagined or attained.
But proofs—correct proofs—just weren't at hand.

In 1994 (at last!), Andrew Wiles,
who'd set himself this marginal task,
announced to the world—
he'd found a proof!
His intricate wealth of ideas
received close scrutiny and, truth be told,
a flaw was found. But with his colleagues' timely aid
this was cleverly amended.

As often happens when mathematics
is given free play, Wiles' primary target
turned out to be a consequence
of a related theory others had refined
without the thought of Fermat uppermost in mind.

The whole world was stunned—if only briefly—
and marveled at what Wiles had wrought,
while some of us (mathematicians chiefly)
blessed what those marginalia had brought.

*David A. Buchsbaum
January 29, 2001*