Had anything been wrong with the fundamentals of quantum mechanics we should certainly have heard.

Margenau and Wigner, Philosophy of Science, 29:3 (1962)

*

I believe that the conceptual structure of quantum mechanics today is as unhealthy as the conceptual structure of calculus was at the time Berkely's famous criticism was issued. [...] The parallel with the eighteenth century situation in the foundations of the calculus is surprisingly close: setting $dx = 0$ *after* one has divided by dx 'works'. But *mathematically* this procedure is wholly unjustified.

Hilary Putnam, Philosophy of Science, 31:1 (1964)

*

Apart from the latter interpretation, the Copenhagen interpretation still is the dominate one. Is this dominance because this interpretation is the simplest, the most viable, and the most natural? Or is it because of the inertia of physicists who do not want to waste much time on irrelevant interpretational issues, so that it is easier for them to (uncritically) accept the interpretation to which they were first exposed? I believe that the second answer is closer to reality.

Hrvoje Nikolić, American Journal of Physics 76, 143 (2008);

*

Actually quantum mechanics provides a complete and adequate description of the observed physical phenomena on the atomic scale. What else can one wish? [...] The scandal is that there are still many articles, discussions, and textbooks, which advertise various interpretations and philosophical profundities.

N. G. van Kampen, The scandal of quantum mechanics,
Am. J. Phys. 76, 989 – 990 (2008).

*

Niels Bohr brainwashed a whole generation of theorists into thinking that the job of interpreting quantum theory was done 50 years ago.

Murray Gell-Mann, 1976 Nobel conference

*

If quantum theory had been in a crisis, experimenters would have informed us long ago! Our purpose here is to explain the internal consistency of an "interpretation without interpretation" for quantum mechanics.

Christopher A. Fuchs, and Asher Peres,

Quantum Theory Needs No 'Interpretation'
Physics Today 53, 3, 70 (2000)

*

Yet today, nearly 90 years after its formulation, disagreement about the meaning of the theory is stronger than ever. New interpretations appear every day. None ever disappear. This situation is odd and is arguably an obstacle for scientific progress, or at least for a certain kind of scientific progress.

Adán Cabello, Interpretations of quantum theory: A map of madness, 2016

*

Projekční postulát a jeho role v popisu kvantového měření je již zhruba osmdesát let předmětem debaty. Kodaňská a z ní během let odvozená standardní interpretace, které jsou oněch osmdesát let pro praktické účely univerzálně a úspěšně používané, oddělují mikroskopický systém od klasického okolí; do klasického okolí pak patří i měřicí přístroje, jimiž mikroskopický systém měříme, a jež se samy chovají klasicky. Kodaňská ani standardní interpretace se příliš nezabývají otázkou, jak by měření probíhalo, kdybychom považovali i měřicí přístroj za součást mikroskopického systému a popisovali jeho stav řešením Schrödingerovy rovnice. Nepodává ani jasné vysvětlení, proč popíšeme-li makroskopický objekt kvantově mechanicky, nepozorujeme stav odpovídající superpozici možných stavů systému, tak jak to známe v mikrosvětě (známý problém Schrödingerovy kočky).

Jan Klíma and Bedřich Velický. Kvantová Mechanika I. Charles University in Prague, Karolinum Press, 2015