Why do you think your paper is highly cited?

Studying integral operators on some spaces of real functions is a classical problem. Since the mid-sixties there has been a growing interest in studying weighted composition operators on spaces of holomorphic functions on the unit disk, while the study of integral operators on these spaces began somewhat later. It is of interest to provide function-theoretic characterizations in terms of inducing symbols for the boundedness, compactness, essential norm, and other operator-theoretic properties of weighted composition operators or integral operators on spaces of holomorphic functions.

Quite recently we initiated studying products of weighted and integral-type operators on spaces of holomorphic functions on the unit disk. A natural problem was how to define products of weighted composition and integral operators on some bounded domains in C^N, for example, on the unit ball. In the paper: S. Stević "On a new operator from H^∞ to the Bloch-type space on the unit ball," *Util. Math.* 77: 257-63, 2008, this problem was solved by introducing an integral-type operator on the unit ball denoted by P_g^φ. Having introduced this nice operator we arrived in a position to investigate its operator-theoretic properties in terms of inducing symbols φ (a holomorphic self-map of the unit ball) and g (a holomorphic function on the ball). In the paper: S. Stević "On a new integral-type operator from the weighted Bergman space to the Bloch-type space on the unit ball," *Discrete. Dyn. Nat. Soc.* Vol. 2008: Article ID 154263, 14pp. , 2008, I proposed a big research project in this direction. These two papers, among others, give some asymptotic formulae for the essential norm of the operator P_g^φ from the space of all bounded holomorphic functions (correspondingly, the weighted Bergman space) to the Bloch-type space.

On the other hand, in the note: S. Stević, "Norm of weighted composition operators from Bloch space to H_μ^∞ on the unit ball, *Ars. Combin.* 88: 125-7, 2008, I managed to calculate the norm of the weighted composition operator from the Bloch space to a weighted-type space on the unit ball and reestablished interest in calculating operator norms of these operators. We have to point out that usually only some asymptotic expressions for operator norms are given.

The above mentioned papers motivated us to try to calculate the essential norm of operator P_g^φ between some spaces of holomorphic functions. In my featured paper, I calculated the essential norm of the operator P_g^φ from the Bloch space to the Bloch-type space. This seems to be the first paper to provide an exact (nonasymptotic) formula for essential norm of an integral-type operator, moreover in the setting of the unit ball. These are some of the reasons why my paper is so interesting.

Does it describe a new discovery, methodology, or synthesis of knowledge?

To calculate the essential norm I have used a lot of tricks and ideas, so the paper seems a very good synthesis of knowledge combined with experience and innovation.

Working on calculating the essential norms of integral-type operators, I have realized that one of the key points is to calculate the supremum over the unit ball in the domain space of the distance between images of two arbitrary points in the unit ball in C^N. If we are able to get such a formula, a precise upper estimate for the essential norms can be obtained.

As usual, to get an estimate from below, we need a careful choice of a family of test functions. This choice is closely related to the point evaluation estimate for the functions from the domain space. The estimate often motivates us for how to choose the family, and at this point, some experience often plays a significant role.

Would you summarize the significance of your paper in layman's terms?

This paper, along with the first two mentioned above, introduces a new integral-type operator which considerably extends several operators of interest from the literature, and initiates studying of its operator-theoretic properties in terms of the inducing symbols. It also gives a new insight in the studying of essential norms of integral-type operators.

The method we described could be useful in many other cases. For example, using this method, in my recent paper: S. Stević "Essential norm of an operator from the weighted Hilbert-Bergman space to the Bloch-type space," *Ars. Combin.* 91: 123-7, 2009, I calculated the essential norm of operator P_g^φ from the weighted Hilbert-Bergman space to the Bloch-type space in the unit ball.

How did you become involved in this research, and were there any problems along the way?

Motivation for this paper essentially stems from the theory of composition operators where there are a few results on essential operators.

In general, it is well-known that I am a self-taught mathematician who was working without an advisor. I was simply searching for areas which could be of interest to me. In coming across some papers on composition and integral operators about ten years ago, I began working on these topics. In doing mathematics, we still mostly rely only on literature. My wondering through libraries and skimming through research journals was a good starting point for discovering research areas of interest.

Where do you see your research leading in the future?

I will certainly continue to systematically study operator-theoretical properties of various concrete operators on spaces of holomorphic functions in various domains.

Some types of nonlinear difference equations, which are not closely connected to differential equations, such as, rational and max-type difference equations, are also in my domain of interest. My papers in this area have also attracted considerable attention. For example, among others, I recently introduced a new method called "Oachkatzlschwiof" or "squirrel-tail," which seems quite useful in studying these equations.

It is known that I am also interested in several other areas of mathematics and it is difficult to say which other area I may choose to work on. One of the reasons why working on math is so interesting is that everything seems connected somehow. If you start to work on one thing, it could lead you in another direction entirely, which seemed not so close at first sight.

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