

The real reason men dominate major piano competitions

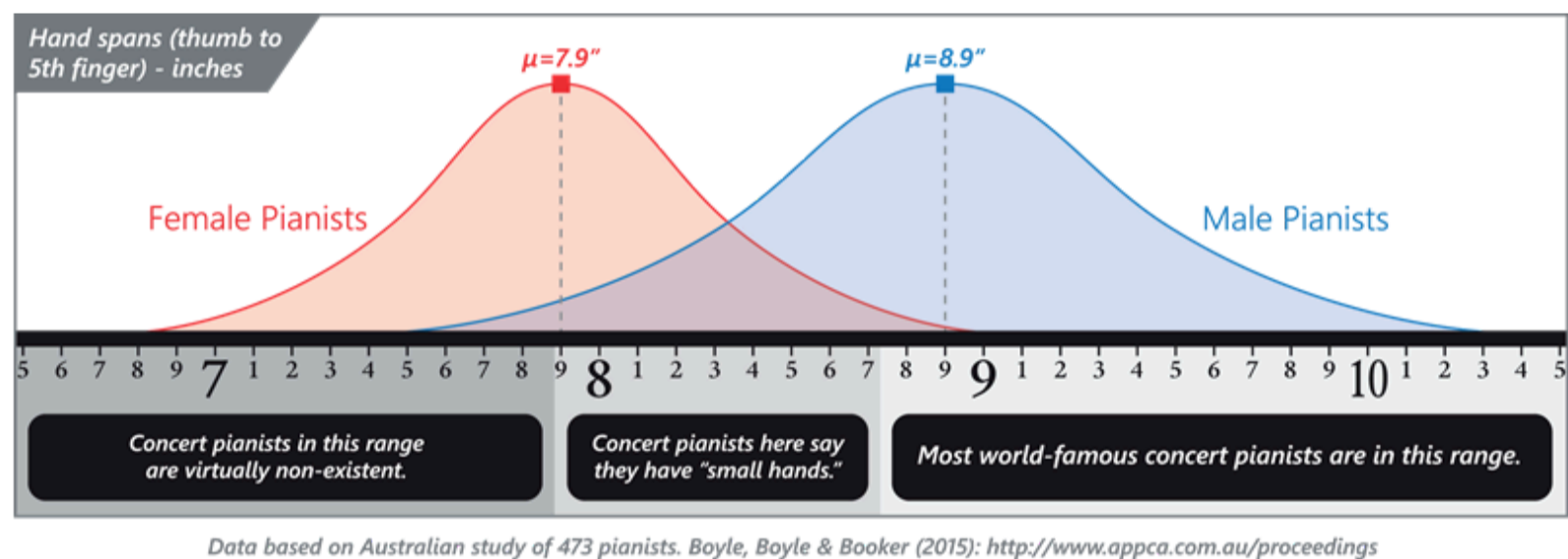
Rhonda Boyle

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Rhonda Boyle presents peer-reviewed evidence to explain the lack of women among the top prize winners at major piano competitions – this does not involve jury bias

This is a response to Charlotte Gardner's article in the Spring edition of *International Piano*, 'Addressing male dominance', where the biggest reason for male dominance in the piano world is not recognised by the author. Piano keyboards come in one size – people don't! As many other authoritative writers have noted, including UK concert pianist, adjudicator and educator Murray McLachlan and the leading US academic Professor Carol Leone, the overriding issue is the distinct difference between male and female hand spans combined with the need for all pianists to perform on a 'one size' piano keyboard, unlike the situation with most other musical instruments. The keyboard of today is relatively large by historical standards and overwhelmingly suits the hands of adult men.

In earlier articles on this topic, both in *IP* and other media, writers are largely barking up the wrong tree by suggesting unconscious gender bias among juries or sexist attitudes in conservatories. Given the gender discrimination that has been, and still is, apparent in other professions (including conductors), such assumptions are not unreasonable. Other suggested 'reasons' given for the male predominance in piano performance include women's lower expectations of themselves or a tendency to spread their efforts too thinly, their specific family responsibilities and men's greater stamina or muscularity. But the low proportion of female entrants and prize winners in elite competitions is more easily explained by the mismatch between the hand spans of most women and the modern piano keyboard.



The seminal work of Otto Ortmann a century ago, summarised in *The Physiological Mechanics of Piano Technique*, which highlights the importance of ergonomics and biomechanics, has largely been forgotten, and is often not understood. Ortmann wrote: 'The three factors of hand width, finger length and finger abduction [which determine hand span] ... will explain a large number of technical difficulties that are often wrongly attributed to defects of coordination and studentship.' And also: 'Fine dynamic gradation with the fingers in extreme stretches is physiologically impossible.'

It shouldn't need to be stated that men tend to be taller, bigger and heavier than women and children. The most important difference for piano-playing is hand span. Peer-reviewed research consistently shows that on average, men have significantly larger hand spans than women (a difference of one inch or 2.5 cm, slightly more than the width of a white key), and that this conveys a massive advantage for those with larger spans. The conventional 6.5-inch (16.5 cm) octave keyboard, established in the late 1880s when large-handed male virtuosos dominated large concert halls, does not suit most women. It suited the male virtuosos of 100 years ago, just as it still does today.

But does this difference in average male and female hand spans really matter? By looking at the published peer-reviewed research within a statistical context, it certainly does – assuming a pianist wants to play much of the demanding repertoire expected of competition entrants. Here are a few facts:

A majority of adult men (76%) can play a tenth, while 87% of women cannot. Most commonly, women struggle to play even a ninth.

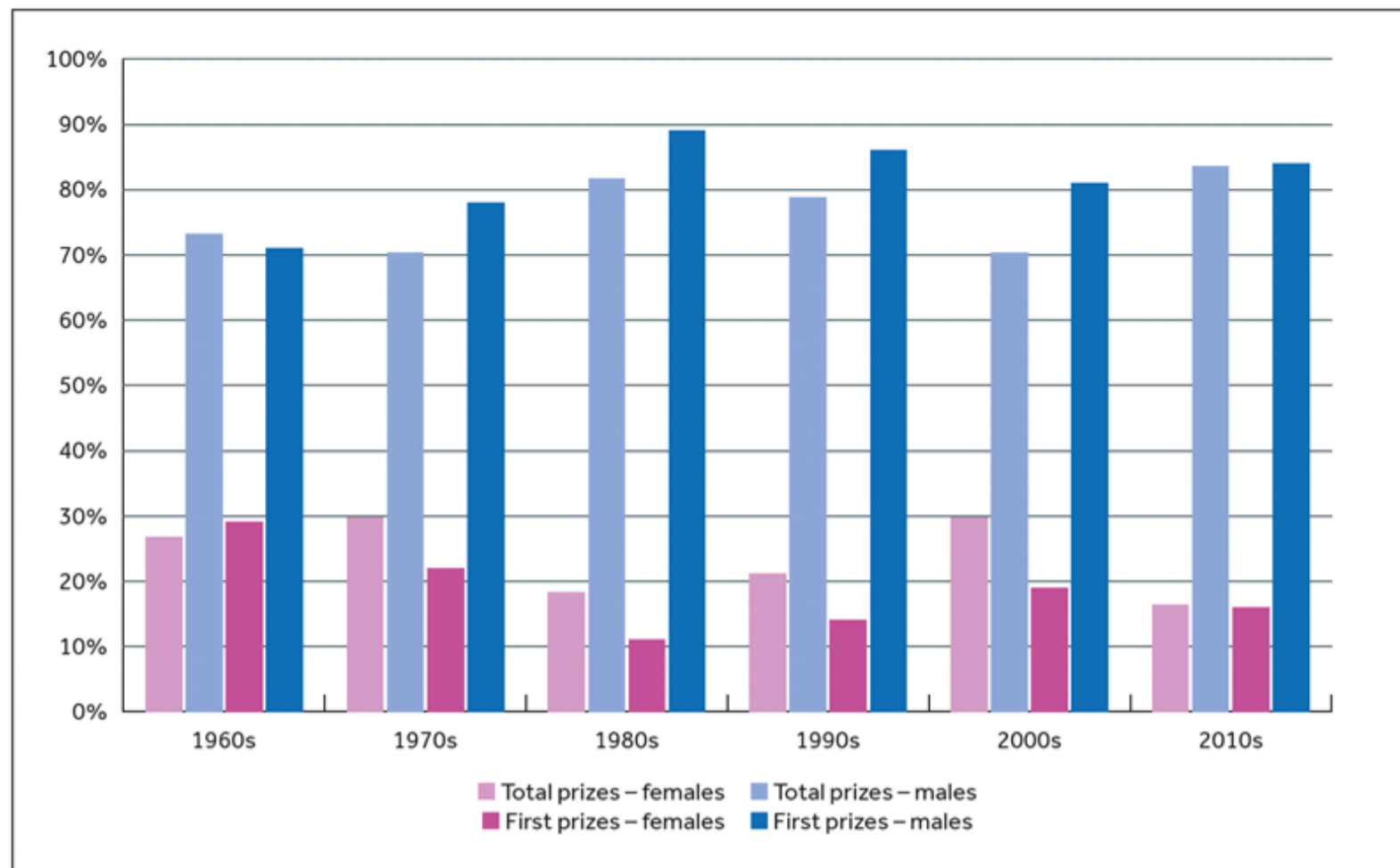


Figure 2: Proportion of female prize winners by decade across 13 major piano competitions

Based on prize winner data compiled here: paskpiano.org/gender-differences-in-major-competitions-and-performing-careers

The importance of having a span that covers a tenth is conveyed in an excellent video by Canadian pianist Linda Gould – available on YouTube (search 'My Piano has a Secret'). Her small hand span is typical for a woman but exceptionally rare for a male.

The literature points to the much higher rate of performance-related injury among women, and their need to tolerate pain when playing demanding repertoire that requires wide stretches.

The typical hand position of a woman playing octaves is relatively flat, stretched out and positioned close to the front of the white keys. This leads to a build-up of tension in fast passages of octaves and large chords. Men can normally form a comfortable 'bridge' over the black keys which means relaxed octave-playing, along with the availability of far greater power and dynamic range.

The growing body of consistent anecdotal evidence from pianists whose hands do not comfortably match the 6.5-inch octave supports the scientific research. When they first play pianos with narrower keys they discover their huge capacity for improved musical expression when technical difficulties are eliminated, greater power and ease, absence of pain, greater security and shorter practice times. They often realise for the first time that *they* were not the problem, it was the instrument!

Figure 1 is based on data from an Australian study of the hand spans of nearly 500 pianists and puts the gender difference in hand spans into context.

When you consider that an 8.5-inch hand span is the benchmark for being able to reach a tenth, it is not surprising that women are under-represented among entrants in elite competitions. As can be seen from the competition statistics that I monitor (see paskpiano.org), the proportion of females often drops further among prize winners and even more so among first prize winners in the vast majority (13 out of 15) of these competitions. The two exceptions are competitions devoted to Bach and Mozart, whose music does not require large hand spans.

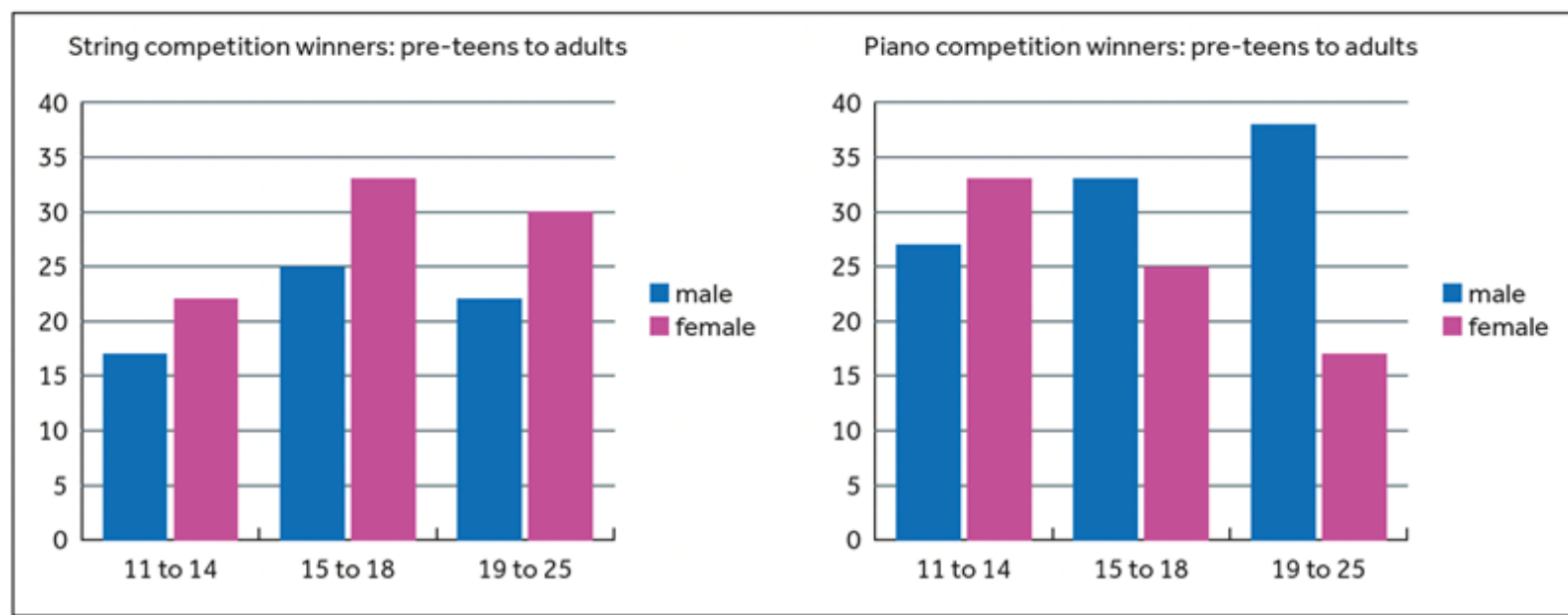


Figure 3: MTNA national competition first-prize winners from 1963/64 to 2023/24

Looking at the prize winner data for these 13 competitions over time (Figure 2 on page 11), we can see that the gender imbalance has not improved since the 1960s! From the 1980s onwards, female first-prize winners range between 10 per cent and 20 per cent of all contestants.

And if there is gender bias among juries, how do we explain the comparative numbers of first-prize winners in strings and piano for the national MTNA competitions (USA), and the change across age groups for piano but not strings (see Figure 3 above)? In the youngest age group for piano, girls even outperform boys, then their numbers drop off as age and repertoire demands (suited far more boys than girls) increase.

In a detailed article in the November 2022 issue of *International Piano* (page 25) Vincent Lenti examined the history of gender bias in piano competitions. He subsequently shared with me his analysis of jury voting patterns at the 2015 and 2021 Chopin competitions; he could find no evidence of jury bias!

Fortunately, changes are starting to happen within the piano industry, with some manufacturers offering an option for narrower keys in existing models, including Steingraeber and Hailun. The same is true for some digital keyboard start-ups. By making available two smaller octave sizes (6.0 and 5.5 inches), nearly all adults (and indeed children) can be accommodated. Alternative actions can quickly and easily be switched over in grand pianos used in concert venues and competitions – thus going a long way to levelling the playing field.

As Charlotte Gardner concludes, something is going on with women and piano performance. The answer is quite simple and has its roots in a piano keyboard that has been skewed towards larger-handed males for over a century. The fact that at least 50 per cent of women are effectively barred – by their physical characteristics rather than their musical talent – from even thinking about entering a major piano competition, and even fewer win first prizes or go on to successful performing careers, is entirely explainable by the evidence. Those women (and men with smaller hands) lucky enough to have access to narrower piano keys are now finding new performing opportunities; the International Stretto Piano Festival, now in its fourth year, is shining a light on this growing global community of talented artists.

Rhonda Boyle is Global Coordinator of Pianists for Alternatively Sized Keyboards (PASK): paskpiano.org

This article originally appeared in the Autumn 2024 issue of *International Piano*. [Never miss an issue – subscribe today](#)

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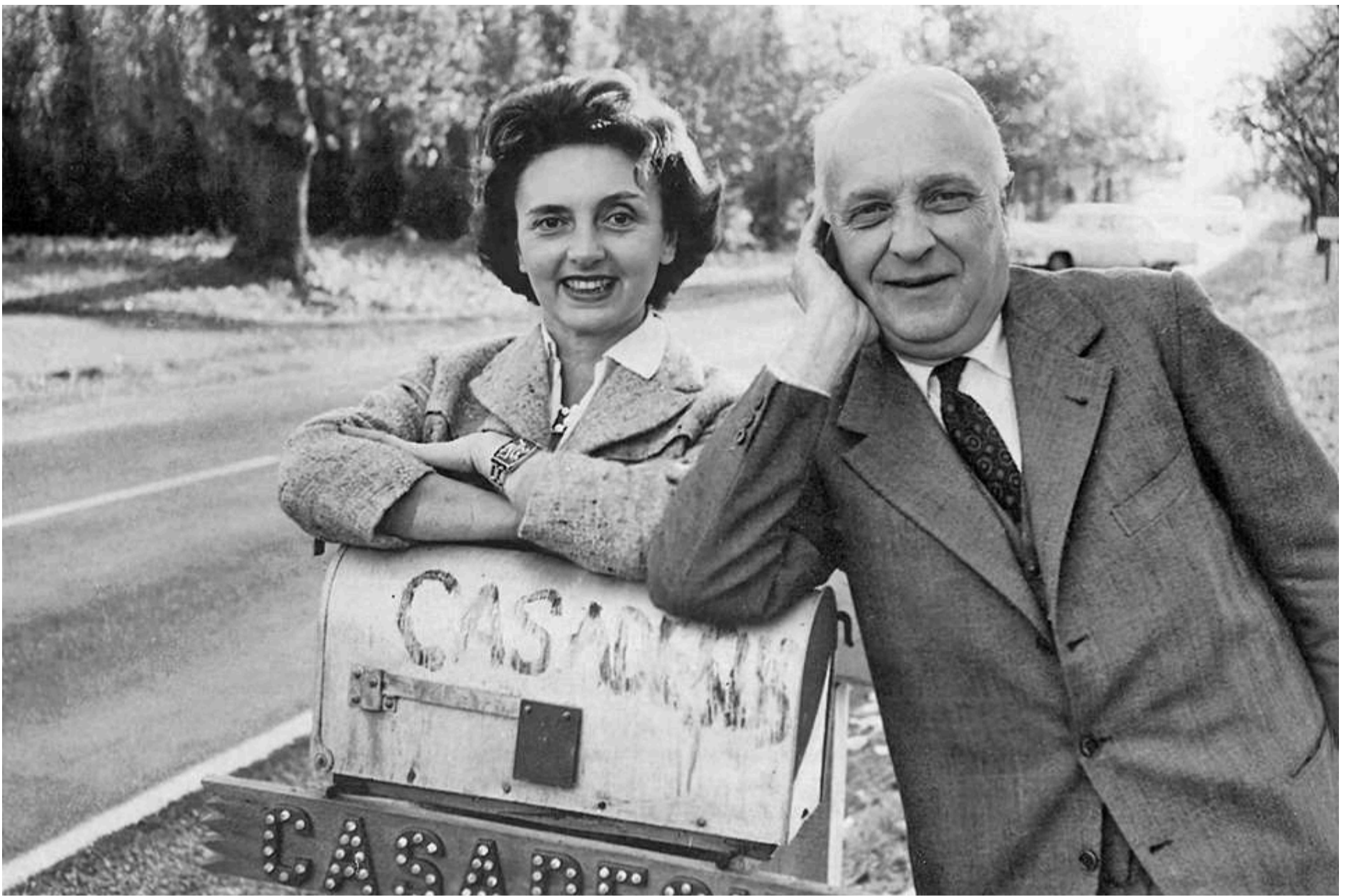
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