

The English Square Piano

(1760-1840)

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Joanna & Andrew Lancaster - Arundel Recital 2006

1. Introduction

The experiments early in the eighteenth century to create a keyboard instrument capable of playing both loudly and softly (unlike the spinet or harpsichord) which were under way in both Italy and Germany, seemed to bypass Britain. The harpsichord and spinet seemed secure. It was not until the 1760's, when instrument makers from Saxony settled in London and started building small square pianos that any interest was taken in these new instruments. However, these small pianos soon became the rage. From the mid-eighteenth to the mid-nineteenth centuries the square piano was the domestic instrument par excellence. The grand piano, for use in concert halls and large houses, developed and progressed; the present day grand being a recognisable descendant of its eighteenth century progenitor. The

square piano, unable to accommodate the increasing compass and increased tension, produced by demands for greater sonority, was ultimately to be superseded by the upright. It is important to remember that the square piano is an instrument in its own right, as is the harpsichord or clavichord. Those who cavil at the tone as being different from that of the modern piano are missing the point; this is the sound which was familiar to the music loving world at this time, the instrument on which the majority of people would have listened to all the music ever heard, and on which the composers of the time composed and knew that their music would be predominately played.

2. Genesis

Experiments were in hand very early in the eighteenth century, by Bartolomeo Cristofori in Florence and others, to produce a keyboard instrument capable of playing both loudly and softly, unlike the harpsichords and spinets. These early piano designs were extremely successful, but were considered far too complicated and difficult to manufacture by instrument makers of the time, and were not accepted by the musical public, who either ignored them or were more positively disapproving. Many of these early ideas incorporated in a surviving piano of 1726, were effectively re-introduced later in the century as the pianoforte evolved.

In the early 1760's a group of instrument makers left Germany, settling in London to avoid the Seven Years war. One of these was Johannes Zumpe, who built small square pianos. In 1768 J.C.Bach performed the first solo piano pieces to be heard at a concert in England, thereby conferring 'respectability' on the instruments, which became immensely fashionable; so much so that no one who considered themselves to be of any consequence would be without one. The name Zumpe was virtually synonymous with the pianos which he built and the number of manufacturers of such pianos escalated as they tried to supply the almost insatiable demand for the instruments.

3. Single Action

The earliest square pianos in England, produced from the early 1760's, were small, very simple instruments of five octaves. The tone was reminiscent of the spinet or harpsichord, only gradually becoming more 'pianistic' and sweeter toned as the century progressed. They quite obviously satisfied the musical public of the time. They had an extremely simple 'single action' in which a small leather capped push rod at the back of the key struck the underside of the hammer, bouncing it into contact with the string. This action, although effective, was limited in the range of dynamics that could be obtained; but even so offered many performance advantages over the harpsichord. Within a few years, the potential of this capacity to play expressively underlined the limitations of the unsophisticated single action and led to experiments both in England and the rest of Europe.

4. Double Action

As performers began to demand an increased dynamic range, more precise damping and a greater compass, so the instrument makers began to respond to this and the instrument developed.

The action which became the 'standard' square piano action in Britain was the English double action patented by John Geib, an employee of Longman & Broderip, in 1786. This featured an intermediate lever to increase the velocity of the hammer and an escapement to allow the hammer to fall well away from the string even if the key was held down. His mechanism enabled the action to be finely adjusted and greatly increased the reliability and



Joanna and her double action Stodart of 1823

sensitivity of the system overall, along with significant gains in the dynamic range available. This action is extremely flexible and responsive, transforming the square piano into an instrument of great subtlety and expressiveness and a joy to play. The much admired "wash" of sound which the English pianos achieved was due largely to the lighter and less immediate damping found in these instruments. These later square pianos have a full singing tone of great beauty; although there is no soft pedal due to the lateral position of the strings, the instrument is capable of a wide range of dynamics including a soft sweet *pianissimo* as well as a grand *con fuoco fortissimo*, if handled sensitively by the player. Although they were small, the tone is robust and carries well and they were frequently used for recitals during this period.

The early instruments were relatively small but had a surprisingly robust sound capable of filling the rooms used for concerts at this period. As the nineteenth century progressed, with the compass of the instrument increasing slightly and the tone sought by the musicians became progressively more 'pianistic', the sound of pianos became fuller and developed the characteristic sweetness of the late square pianos. By mid nineteenth century, square pianos with a compass in excess of six octaves were being built, but the much larger cases were less popular and eventually the square piano ceased to be made, superseded by the ubiquitous upright piano.

5. Conservation v. Restoration

A number of instruments have survived in good original condition with strings and hammer coverings intact. While it is important that some of these should be preserved in this condition, the effect of age on the strings and on leather hammer dressings produces a noticeable degree of tonal decay. For example all the instruments used in Athene Records' recordings have had strings and the top hammer dressings renewed, using authentic materials, so that the sound will be as close as possible to that which the original owners heard when the pianos were new.

Should you become the owner on one of these pianos, the question that has to be asked is, '**Do you want to play it?**' If so, then it needs to be restored - but it must be done by a professional and specialist restorer who will use the correct materials and restore it to play and sound as it would when built some 200 years ago. A bad or unsympathetic restoration can result in a most unsatisfactory instrument to play, and by removing evidence of what was there originally and perhaps doing damage, can make subsequent restoration more complicated - and therefore, more costly.

If you are *not* planning to play it, but simply to keep it as a beautiful and interesting piece of furniture, then it will not deteriorate further left as it is. But please, do not attempt modifications to the mechanism yourself, in case restoration is subsequently required.

6. Tuning

There is as much debate about the correct pitch now, as there was in the 18th and 19th centuries. Some period performers favour $a'=430$, some $a'=425$, some $a'=415$ etc. Pitch throughout Europe in the 18th and 19th centuries varied from country to country, in fact Paris alone in the 1820's had three pitches in use at the same time. For music of Haydn - Mozart period I personally prefer to use $a'=415$ as a complete semi-tone below present pitch seems to be more acceptable to many people, than a note which effectively falls 'in the cracks'.

Obviously to tune a period piano up to modern pitch when it was designed for the lower tensions of the lower pitch one would be placing the instrument under greater tension with consequent potential to damage to both strings and the frame of the instrument. Also the tuning would almost certainly be less stable and the tone unnaturally bright.

Perfect pitch, which many today consider an advantage, would have been a positive disadvantage in this period when they would had to have constantly adapted to differing pitches on their travels. It is interesting to consider, for example, that Schubert would never have heard any of his compositions performed in $a'=440$! We will not go into the complications of temperament, it is sufficient to observe that equal temperament was not used by Broadwood until the 1850s.