

# The Decline of the Traditional Church Choir: Exegesis and Summary

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## Introduction

As a preface to this third article of what seems to have become a small series, I would like to apologize for the style of the first two. I was quite properly criticized by Mr Steven Beet [14] for writing a “scientific treatise” that was “rather dry”. He has my sympathy! In my own defence, I would merely remark that at least the analysis of available data is now recorded [15] and reference can be made to it should anyone feel inclined to challenge the veracity of the data, the method of analysis or the conclusions I drew from the results. Although constructive criticism was welcome, I would far rather have received some reaction, indeed any reaction, from those whose advocacy and promotion of the girl chorister seems to have led to the destruction of our tradition. I temper my accusation by using the words ‘seems to have’ because my analysis may be ill-founded and therefore any conclusions drawn from it may be incorrect. However, to date I’ve received no criticism of the substance of what I wrote but only of the manner in which it was expressed. Moreover, there has been no reaction even from those expected to be critical [16]. Perhaps they too found the articles heavy going; or perhaps they could find no fault with the reasoning and are hoping that their complicity in the destruction of the tradition will pass unnoticed.

## Mathematical modelling and the use of analogy

Before “summing up my conclusions in plain English”, as suggested by Mr Beet, I’ll try to explain my rationale in less technical language. As the remains of what was once a physicist, my instinctive reaction to almost any problem is to think in terms of the very general principles which lie at the heart of physics. I should add that as mathematics is the natural language of physics, it is hardly surprising that I attempt to quantify matters rather than deal in qualitative and often vaguely-defined ideas. In a sense, the mathematical embodiment of these principles is an *analogy* of the physical reality, what is now fashionably described as mathematical ‘modelling’. Incidentally, I mean by the term ‘analogy’ the correspondence that things or ideas can have one to another; that the one can be a representation or even an image of its analogous counterpart. The analogies between the material world and mathematics, or between one aspect of the material world and another, important though they are, represent only a small part of a much wider field of application. As an example of this wider use of analogy we may cite theology (in which the analogy is often between the nature and attributes of God and Man [17] or as a form of logical inference [18]),

So the grist of my analysis was initially the number of choirboys known to have been members of Anglican parish-church choirs in various years after WW2. The principles borrowed from physics allow the two sets of data - number of boys and time - to be simply related - in mathematical language, the former is said to be a function of the latter. A question that arose at the outset was whether the obvious fall in the number with the passage of time could be given a concise mathematical description; could we find an underlying principle that would lead to a formula for the number at any given time?

## Tea and choirboys – an analogy

There are very many examples in physics of quantities that change with time, e.g. the temperature of a cup of tea. It is initially too hot to drink at a notional  $90^{\circ}\text{C}$ , but after five minutes let us assume that it will have cooled by  $40^{\circ}$ . That being the case, we would then find that after a further five minutes, although it will have continued to cool, the temperature will have fallen by only  $17.1^{\circ}$ . Similarly, after two further periods of five minutes, the temperature will fall first by  $7.4^{\circ}$  and then by  $3.1^{\circ}$ . Eventually - theoretically after an infinite time - the temperature would reach  $20^{\circ}$ , if that be the assumed ambient temperature. The question is, “What is the underlying principle that would allow us to predict the temperature after, say, twelve minutes?” The answer was provided in the seventeenth century by Isaac Newton. He realized that the rate at which the temperature falls is directly proportional to the difference in temperature between the tea and its surroundings. More succinctly put, we may say that the greater the temperature excess over the surroundings, the more rapid the cooling. (In mathematical form, this simple principle is expressed in the form of a differential equation the solution to which is the so-called exponential cooling curve.)

So what has Newton’s ‘law of cooling’ to do with the number of choirboys? The answer is that just as the temperature of the tea falls at an ever-diminishing rate as thermal equilibrium is approached, then by analogy the number of choirboys falls at a diminishing rate as the last few slowly disappear. In both cases, the further the system is from its final equilibrium state (tea at room temperature or no boys), the more rapidly it changes. The importance of the analogy from our point of view is that using relatively little data we can calculate the number of boys we can expect to be in choirs in any given year.

## The mechanism of change

The descriptions of these two processes – the cooling of tea and the loss of boys - is purely phenomenological, a mere description of what happens. What is required is a mechanism to explain why any change occurs at all. In the case of the tea, we know that heat generally flows from hotter to cooler bodies, but why should boys have given up singing in church choirs? No doubt there are many possible explanations. However, a factor that experience shows to be highly significant is the advent of the choirgirl. One indication that this assertion is correct is that the admission of girls occurred at the ‘right’ time in that the decline in the number of boys seems to have begun when girls were first admitted. Moreover, it is entirely understandable that boys would be loath to participate in what would be increasingly regarded as an unmanly and perhaps even effeminate activity. In these terms, we have the beginnings of a theory, based on a hypothetical mechanism that not only fits the facts but, through the solution of a differential equation, does so quantitatively.

In the first article, I developed the argument to include the initial steady-state which I assumed to exist before girls were admitted into parish-church choirs. This modification has the effect of converting a simple ‘cooling’ curve into the logistic curve, described in some detail in that article. Had girls never been admitted, the theory implied that there would have been no decline in the number of boys. No doubt this aspect of the analysis would seem to be an oversimplification in that there might conceivably be many other factors that could account for the fall in the number of choirboys. However, is it not likely that many factors act indirectly to discourage boys? One such factor could be the predominance of female teachers in State primary schools. There seems to be little doubt that girls will tend to regard female teachers as role models whereas boys in the same circumstances are more likely to feel

alienated. The result is that on average girls will 'do better' educationally than boys, and as a consequence will tend to be more confident and assertive. They are therefore more likely to join choirs, particularly if encouraged to do so by female teachers. On the other hand, boys who may already feel disadvantaged by the feminization of education, and perhaps lacking a father figure at home, will be disinclined to join mixed choirs. To do so would merely extend their classroom disadvantage, whether real or imaginary, into their leisure time. If, as might be supposed, the immigration into this country of those of other faiths has also affected the number of choirboys, we might ask why the number of girls wasn't similarly affected. But then, at the time when the change in the composition of choirs was most rapid - from about 1960 to 1980 - mass immigration, and the social and demographic changes that accompanied it, had yet to occur. Of course, since that time these latter changes have almost certainly made any return to the tradition no more than a pipe dream. In short, although the admission of girls into parish-church choirs was probably the main factor in the decline in the number of choirboys, the fundamental causes of both phenomena were almost certainly aggressive feminism and the breakdown of family life.

These two factors are, of course, hardly independent, the former almost certainly influencing the latter. That the CoE should have sanctioned the ordination of women may well be perceived as support for the feminist cause with the tacit rejection of the all-male tradition. Whatever may have been the underlying cause(s) of the decline in the number of choirboys, the presence of the choirgirl was either the direct cause or can reasonably be regarded as a measure of these other indirect causes. In either case, we can use the number of choirgirls as a second (time-dependent) variable and a means of elaborating the analysis, as I described in the second article.

### **Hot tea and cold water; a further analogy**

To explain the way in which the more elaborate theory was developed, we can return to the analogy of the hot tea. Suppose the tea cup had been standing in a second container, this time one containing cold water. As the tea begins to cool, the water temperature will rise. By analogy, as the number of choirboys began to fall, the number of choirgirls - the analogue of the water temperature - began to rise. Although the analogy isn't perfect, we might extend it a little by remarking that eventually the temperature of both tea and water would approach the ambient temperature. By analogy, we should then expect that eventually there will be hardly any children singing in church choirs. And just as the water temperature will pass through a maximum, so we expect the number of choirgirls to do likewise. Advice received from a number of experienced church musicians suggests that the number of girl choristers actually reached a maximum sometime about 1985. On this basis, a more elaborate mathematical model enables the future composition of Anglican parish-church choirs to be predicted. It is then found that by 2030 such choirs, if they exist at all, will be largely composed of elderly women.

As mentioned above, the final temperature of the tea and water will be the ambient temperature, it being assumed that this latter temperature remains constant throughout. If this assumption is incorrect, then the predicted behaviour of the system would also be incorrect. Likewise, predictions of the numbers of choristers and the composition of choirs also depend on the social 'ambience' remaining essentially constant. It is clear that this assumption is hard to justify; but it is equally clear that without some such assumption we would be unable to make any prediction whatever of the changes to be expected in church choirs.

## Summary of the first two articles

In the early 1960s, there were about 182,000 boys in Anglican choirs; in 2005 there were about 700. During the same period, the number of girls rose quite dramatically from virtually zero after WW2 to about 80,000 by 1963. The total number of child choristers reached a maximum about 1970 of roughly 280,000 and was composed of about equal numbers of girls and boys. At this time, the rate of increase in the number of girls was roughly equal to the rate of decrease in the number of boys. At the present time, we have the ludicrous situation in which not only have we lost most of the boys but the number of girls is also falling. The mathematical model I developed suggests that by 2030 there will be only a few hundred girl choristers. An immediate consequence of the silly 'us too' attitude of the feminists is that there is now about a million men in the general UK population who would have been boy choristers had the tradition not been undermined. These men would have had some exposure to Christian influences in spite of the secularization of State education.

## Conclusion

I mentioned above the very general principles which lie at the heart of physics. Some might regard these principles as metaphysical in that they are 'fundamental truths which cannot be inferred from anything more fundamental' [19]. Others would be more dismissive claiming that the topic involves 'the constant assertion of statements unverifiable in principle' [20]. However, no progress in science could have been made without the use, albeit mostly tacit, of these fundamental principles. One such idea is that the behaviour of the physical world should conform with 'laws' of one kind or another, even if such laws are essentially statistical. Another is that these laws are almost invariably idealizations in that they focus on the so-called main factors [21a] and ignore the effects of secondary factors, either because they are known to be negligible, or by assuming them to be constant. In our example of the cup of hot tea, the main factor is the temperature of the tea; the secondary factor is the temperature of the surroundings.

By analogy, in developing a mathematical model of the number of choirboys, I ignored a number of secondary factors that are rather more significant now than they were forty years ago, e.g., the impact of TV advertising, the 'popular' music industry and teenage consumerism generally. But the one secondary factor that I didn't ignore in developing the initial model was the advent of the choirgirl; this factor could hardly be regarded as negligible for all the reasons already given and must be regarded as a second main factor. As I also mentioned, this second factor is associated with a number of other so-called 'concomitant' factors [21b], in particular, feminism and the impact of social engineering on family life in the UK. In both respects boys have been affected particularly badly. The steady feminization of State education and the lack of suitable role models have disadvantaged boys to the point at which we are now in danger of creating a backlash that has perhaps already become a criminal subculture. Just as feminism - the advocacy of women's rights on the grounds of the 'equality' of the sexes - is based on a simplistic notion, so also is socialism in that it relates to the community as a whole and largely disregards individuality. The somewhat surprising fact about these two 'isms' is not just that in their time they were seen to be good things, but that those times now appear to be well and truly over.

My reason for this assertion is that in both cases their proponents ignored secondary factors that have now become more significant than the discrimination and poverty that brought them into being. We now find that alongside the ignorance and stupidity of some feminists [22]

there is a growing recognition [23] by some highly articulate and enlightened women, some of whom were proponents of feminism [24], that it has become a social evil. Likewise, it is now evident that although English socialism had its roots in a compassionate attempt in the early sixteenth century to educate the poor and to relieve their suffering [25a], it led first to labour militancy and obduracy, and ultimately to unsustainable welfare dependency [25b].

In both instances, there is now something phoney about these two 'isms'. Women in the UK have had access to much the same educational opportunities as men for many years. As early as the 1870s there was a resolve "to establish girls' education on the same footing as that of boys" [26a], and by 1948 even Cambridge University, the last bastion of male exclusivity in higher education, gave full membership to women - who incidentally had acquired the vote twenty years earlier in 1928 [26b]. Not only does the State education system now clearly favour female pupils, no doubt a consequence of the dearth of male teachers - presently at an all-time low [27a] - but the universities now admit more women than men [27b]. A further curious trend is that the total number of university applications for 2006 was 3.4% lower than in 2005, a fall for the first time in six years, and in spite of government policy (if we ignore the imposition in England of university tuition fees.) However, quite apart from the dire social consequences these facts imply, the long-term economic consequences of students opting out of science and mathematics courses [27c] could be even more serious. The unholy combination of socialism and feminism that has dominated public life in the UK in recent years can now be judged by its results; I need hardly mention the seemingly endless list, but the destruction of the traditional parish-church choir must surely be one result.

One final analogy will serve to illustrate the rest. The UK can be likened to a lifeboat foundering in a rough sea but in sight of the shore. A small feminist minority insist that the oars are shared equally between the men and women regardless of whether they can row. No sexism here! When the boat begins to sink and the oars are finally given to those who can best use them, the feminists insist that all should share in steering the boat even though the rowers have their backs to the shore and can see nothing but water, and the others know nothing of helmsmanship or navigation. No sexism here either! Finally, the boat hits the rocks and all are drowned, regardless of sex or political persuasion. Another 'success' for feminism?

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