

Grateful Vicissitude

Change-Ringing and the
Seventeenth-Century Mimesis
of Divine Providence

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1. Introduction

Change-ringing is many things, but it is primarily experienced as a sound. The purpose of this essay is to explain that sound. It is a long essay because it is a complicated sound, and because until now very little attempt has been made to explain it. Most of its auditors (a group comprising virtually the entire English population, as well as everyone who has seen a British film involving a wedding) cannot give it its proper name, and even among its participants, the mental labor of performing it leaves little energy left for curiosity about its origins. The bells swing unseen behind louvered windows; the bell-ringers stand in a silent circle below them; only the sound itself holds change-ringing's audience involuntarily captive.

This sound must be kept in mind throughout the following discussion. It is the sound of very large and heavy bells being rung first in a descending scale and then in a perpetually varied order, then eventually returning—after three minutes or four hours—to the initial descending scale. But this is a deceptively simple description of a very complex aural experience. The descending scale is easy enough to listen for, but the nuances of the changes are more difficult to grasp. If there is a large number of bells—ten or more—there is usually so small a temporal gap between one bell and the next that it can be difficult to tell how many bells there are at all. In such cases, the initial impression is not of a variation of order but of a variation of emphasis. The ear rests on the highest bells as they move through the sequence, giving a sense of fall or ascent as the order of those bells shifts, while the other bells move to make room. In some types of ringing, the lowest bell sounds always at the end of the sequence, an anchor off which the bell at the front can rebound; otherwise, one change often seems to run into the next, creating an impression of seamless, continuous variation.

Despite this, regular pauses make it possible to aurally trace the path of a particular bell throughout the sequence, especially if that bell is the highest or lowest. Marking the movements of every bell, however, would effectively entail splitting one's brain into as many pieces as there are bells, and is impossible even for an experienced ringer. Generally (with the exception of ringers themselves, and of Thomas Hearne, who in 1734 walked the cloisters of Christ Church listening to the Oxford Ringers and observing "52 faults in their ringing, nine of which were very considerable ones"),¹ one does not attempt to analyze the sound at all. There is simply the general impression of constant variation and baffling complexity, underwritten, presumably, by some species of order too quick and too complicated for the listener to grasp. There must be order, or the bells would not fall so perfectly into the tiny spaces in time carved out for them. Moreover, for the baffled ear, there is the occasional reward of a fragment of the initial descending scale, or an even more pleasing fragment of an ascending one, to remind the auditor that this is all in accordance with some inscrutable grand scheme. The return to a descending scale, when it comes, is unheralded and sudden; that scale is then repeated several times, as if to reestablish order in the listener's mind, and then the ringing stops entirely.

This is about as close an approximation of the listening experience as can be given without the aid of actual bells. The other thing that must be said about the sound of change-ringing is that it is extremely loud. Inside the bell chamber, it is deafening;² outside the tower, directed upwards and horizontally by the louvers, it bounces off every surface and can carry for

¹ Thomas Hearne, *Reliquiae Hearnianae: The Remains of Thomas Hearne, M.A., of Edmund Hall: being extracts from his MS. diaries*, 3 vols. (London: John Russell Smith, 1869), vol. 3, CXLI, Jan. 2 1733/4.

² In Dorothy L. Sayers's mystery novel *The Nine Tailors* (London: Harcourt, 1934), a man dies from being trapped in a bell chamber and subjected to the reverberations of a nine-hour peal. This has been generally dismissed as impossible, but the point about the bells' loudness is well taken.

miles. If it were not sanctioned by tradition, it would most likely be considered noise pollution.³ Its impact on its first audiences, back when church bells were “the most obvious ‘soundmarks’” in a quieter England, must therefore have been overwhelming.⁴

It is my intention in this essay to analyze the particular ideological underpinnings of this impact. Thanks to the predominantly mathematical and scientific bent of modern ringers, the more technical aspects of change-ringing have already been examined, but no attempt has been made to place ringing within an ideological context. Conventional wisdom is that it was the natural result of technological improvements in bell-hanging, and that, while “the ingenuity required for the diversion administered in, and the health subsequent upon this exercise, give it a particular sanction among mankind,”⁵ it has no deeper significance. It has been excluded from studies of the influence of baroque art, and in the first part of the twentieth century, when the “metaphysical” poets were exhumed for modern examination, no attention was paid to the parallel phenomenon of change-ringing, which shares Donne’s complexity and theoretical fascination, if not the quotability of his lyrical lines. Perhaps most confoundingly, an art that originated in ecclesiastical function and was performed on bells engraved with religious inscriptions is generally thought to have been from the beginning “basically secular.”⁶

My aim is to rectify this error. It is my contention that change-ringing rose out of the seventeenth-century intensification of a dissatisfaction with static models of the universe, which

³ It is considered such in Seattle, WA, where there is no tradition of change-ringing in the community, and where a recently-installed ring of eight bells is only rung unsilenced for half an hour each week.

⁴ Bruce R. Smith, *The Acoustic World of Early Modern England* (Chicago: University of Chicago Press, 1999), p. 53.

⁵ “Dr. Kennicott on Ringing in 1742.” William Banister, *The Art and Science of Change Ringing* (London: McCorquodale & Co., 1879), p. 3.

⁶ William T. Cook, “The Development of Change Ringing as a Secular Sport,” in *Change-Ringing: The History of an English Art*, Vol. 1, ed. J. Sanderson (London: Central Council of Church Bell Ringers, 1987), p. 28.

manifested in a desire to create dynamic analogues for the apparently cyclical nature of human experience, particularly in the context of Christian spiritual progress. This impulse fueled the development of the baroque aesthetic in art and music, but it is best articulated in the ingeniously mimetic structural devices of seventeenth-century poetry, to which I shall turn for a final explication of the ideology of change-ringing. In these arts, circular structures and images of orderly change, in concert with the repeated emphasis of Christian praise, involve the reader or listener in an enactment of divine providence, reinforcing religious faith in an increasingly skeptical age. This was the primary function of change-ringing in its early stages of development. Consequently the analysis of this effect in literature enriches an understanding of its role in change-ringing; meanwhile, an analysis of the central concepts of change-ringing will enrich an understanding of the role of ordered change in the poetry under examination.

2. An Explanation of Modern Change-Ringing

I have attempted above to describe the sensory experience of listening to change-ringing. What is going on under the surface is of course vastly more complicated.⁷ The sound is produced by human ringers—each controlling one bell—operating one of the approximately 7000 extant rings of change-ringing-style bells (of which only about 400 are located outside England, mostly in Wales and Australia).⁸ Each bell is hung on a wheel in the bell chamber, and a rope attached to the wheel descends to the ringing chamber below, where it is operated by a ringer. This hanging mechanism is peculiar to English belltowers and vital to the performance of change-ringing. In between ringing sessions, most bells are left right-side-up, but in order to be rung

⁷ Unless otherwise indicated, all facts regarding the system and procedure of change-ringing are the result of my own experience as a member of the Oxford University Society of Change Ringers, or of informal conversations with individual members of the society.

⁸ Dove's Guide County Lists, updated April 2012 (www.dove.cccbr.org.uk/dovecnty.pdf).

properly they must be raised or “rung up,” by pulling on the rope repeatedly until the bell and wheel’s rotation reaches a full 360° and it can be “stood” upside-down against a stay. From this upside-down position, the bell can swing from 0° to 360° when operated by the rope (the stay keeps the bell from toppling over again at the extent of its rotation); thus the bell is sounded twice, as it reaches the apex of its swing both clockwise and counterclockwise, encouraged by the handstroke and backstroke of the ringer below.

The advantage of this system, compared to the dead-hung or free-swinging bells of the Continent, is that fine adjustments can be made in each bell’s speed by the ringers, either by pulling harder or less hard to change the bell’s “compass” (extent of rotation), or by holding the bell up on the balance at the top of its swing. In change-ringing, the bells change places with another in predetermined orders, which is possible thanks to the wheel-hung bell’s capacity for adjustments in speed. When the bells are rung in order, in a descending scale—e.g., 123456 for a group of six bells, with the highest bell numbered 1—they are ringing “rounds”; what follows, in change-ringing, is a sequence of other permutations of the six-bell group—214365, 241635, etc.—ordered according to a predetermined pattern or “method.” In essence, each bell is constantly changing position: for example, the third’s place bell moves to fourth place, then fifth, then sixth, while other bells move to fill its place, always only moving one place at a time. The principle can be likened to the form of a sestina, in which each stanza contains the same line-end words, whose order has been transformed from the previous stanza’s according to a specific formula—or, in ringing terms, a method.⁹

⁹ The “method” of a sestina, *retrogradatio cruciata*, cannot be rung on bells only because the words often move more than one place over at a time; for example, the word that ended the second line in the first stanza ends the fourth line in the second stanza. In ringing, this is called a “jump change,” and is generally impracticable because it would require too significant an interruption of the bell’s compass.

The essence of method ringing is the performance of as many permutations, or “changes,” as possible without ever repeating one; thus “to ring the changes” on something has, since change-ringing’s invention, signified the systematic exhaustion of all possible variations. (This idiom is perhaps most memorably embellished in Daniel Defoe’s *Journal of the Plague Year*, published in 1722, which compares the variety of medicines to be made out of “a certain Set of Drugs and Preparations” to the “several Hundred different Rounds of Musick” to be made by “Ringers of Bells...by the changing and Order of Sound but in six bells.”)¹⁰ Methods facilitate such systematic variation by providing instructions for the movement of every bell. In most modern methods, the first bell, or “treble,” follows a comparatively simple pattern called “hunting” (proceeding from the first to the last place in the change, and then back to the first, and repeating) or a variation thereupon such as treble-bobbing, while the other bells all start from different places along a more complicated pattern or “line.”

This line (commonly called a blue line, as the standard method textbook, *Diagrams*, prints them in blue) is unique to each method, and every ringer (apart from the treble) must memorize it in order to ring the method. The idea is that if each ringer follows the method line correctly, no one will have to worry about what anyone else is doing. In practice, of course, ringers go astray all the time, often because method lines, while easier to remember than numerical sequences of changes, are all quite similar, and despite the byzantine systems of rules ringers have devised to more easily follow them, they can be very easily confused. In such situations, the errant ringer must be corrected by those with the mental capacity to monitor others’ movements as well as their own.

¹⁰ Daniel Defoe, *A Journal of the Plague Year* (London: Oxford University Press, 2010), 239.

Traditional restrictions on method lines—for example, it is conventional for blue lines to be symmetrical around a change in the middle, so that the line’s shape after that change mirrors its shape before it—make memorization easier and the inclusion of every change more difficult. On more than four bells, “calls,” or spoken commands that move some of the bells to different places along the line in a predetermined way (the command itself is usually either “bob” or “single”), are employed to reach more changes without disturbing the method line or going “false” (repeating a change). The composition of call sequences is something of a mathematical feat, of which I do not profess any understanding. A piece of ringing involving calls is called a touch; a touch of around 1200 changes is called a quarter-peal; and a peal, consisting of 5000 changes or more, is change-ringing’s standard unit of achievement, performed always without the help of a method diagram. A peal originally signified an extent of all the possible changes on the given number of bells; thus a peal on four bells was 24 changes, on five 120, and on six 720 (the number of changes possible on N bells being a simple factorial function, $N!$). The 5040 changes possible on seven bells inspired the 5000-change peal cutoff. On higher numbers of bells, however, such as began to be installed at the end of the seventeenth century, ringing extents is impractical. An extent on 12 bells would be more than 479 million changes; as a 5000-change peal takes around three hours to ring, an old-fashioned “peal” on 12 bells would take upwards of 30 years. By contrast, the longest peal on tower bells to date was rung in 1963 and took just under 18 hours.

Of course, even a standard 5000-change peal is taxing, partly physically (despite improvements in bell-hanging, which have significantly reduced the amount of force required) but predominantly mentally. Each ringer must keep track of his or her place in the circle by means of a skill called “ropesight,” which involves the seemingly effortless location of the

person one is to follow; the mental strain upon the conductor, who bears the additional responsibility of performing calls and keeping the other ringers right, may only be imagined. Modern ringing's emphasis is less on feats of physical endurance than on the composition and performance of creative and complicated methods. A "musical" aesthetic in ringing has developed in the last century, attaching value to the more pleasing-sounding changes and encouraging the ingenious composition of methods and peals that include those changes. (By way of example, the most fundamental—and arguably the most pleasing—"musical" change is the roll-up, in which the bells ring in the opposite order to rounds: on six bells, 654321.) At England's smaller parish churches, however, the main role of ringing is still to call the congregation to worship or to mark weddings or occasions of national celebration, and the methods performed are the simpler ones invented near the beginning of change-ringing's history.

That history is now my concern. It is essentially a short one, as the actual development of change-ringing occurred very suddenly within a very small window of time. But before attempting to explain that suddenness, it is necessary to give some sense of its context.

3. The Early History of English Ringing

England's affinity for bells dates back to Middle Ages, and poets make much of its long-standing identity as the "Ringing Isle," but for hundreds of years English ringing was done in much the same way as on the continent. Bells were hung dead (right-side-up), in groups of three or five, in most parish churches and monasteries, and chimed, usually only one at a time, by a

monk or a deacon.¹¹ Because it was commonly believed that bells had the power to drive away demons, passing-bells were conventionally chimed for illness and death.¹²

When a bell is chimed, it does not move, but hangs free (dead) while something is made to strike it. This can be done by pulling on a rope to move the clapper, as was done in the Middle Ages, or by the mechanical operation of hammers, as is done today in chiming the hours. In the fourteenth century, however, this action began to change, and the bell itself began to play a more active role in the production of sound. In order to make the volume and timing of ringing more regular (clapper-chiming allows very little control), English bell-hangers dispensed with continental custom and began to hang bells from rope-operated levers or on half-wheels, so that the bell itself was moving, and the sound was produced by the inertia of the clapper within it.¹³ This allowed bells a range of motion similar to, though less extensive than, the modern full wheel's. In the fourteenth and fifteenth centuries, with the establishment of regular bell foundries, there was also a new trend toward the hanging and ringing of several bells tuned to a scale.¹⁴ The first proper peal in this sense may have been the five massive bells sent by the pope to King's College, Cambridge, in 1456.¹⁵

At around the same time as this move toward increased motion, activity, and number of bells, ringing began to grow beyond its roots in morbid Christian ritual. For occasions of rejoicing, one historian theorizes that the belfry may have attracted young men who used all the bells together, swinging them as high as possible. If the bells were fitted with half-wheels, the

¹¹ Ernest Morris, *The History and Art of Change Ringing* (London: Chapman & Hall, 1931), p. 25; Cook, p. 30.

¹² William Jones, John Reeves and Thomas Blakemore, *New Campanalogia, or a Key to the Art of Ringing* [facsimile], ed. Cyril A. Wratten (Kettering: Dalkeith Press, 1975), p. x

¹³ J. Armiger Trollope, *The College Youths: A History of the Society* (Woking: "The Ringing World" Office, 1937), p. 10.

¹⁴ John C. Eisel, "Developments in Bell Hanging," in Sanderson, p. 18.

¹⁵ Jones, p. xvi.

custom was to raise them in peal “to about halfway up, ringing in descending order or note for a period [in what corresponds to modern “rounds”] and then lowering the bells.”¹⁶ This would have been strenuous exercise in an era before bearings, and it is easy to see why young parishioners would have taken the place of churchmen in such an endeavor, often for money. The oldest extant mention of paid ringing occurs at Saffron Walden, in the churchwardens’ accounts from 1439-40, and does not refer to a religious occasion: “For rynggyn wane ye quene was here iiiid [fourpence].”¹⁷ In the sixteenth century, with the dissolution of most of the nation’s monasteries and a decrease in service ringing, the transition away from religious ringing was mostly complete; new bells were installed out of a desire “to vie with neighbouring parishes” rather than to glorify God,¹⁸ and with the formation of secular ringing societies that mimicked the trade guilds of the Middle Ages, the emphasis of ringing shifted from religious observance to the cultivation of human skill, paving the way for the development of change-ringing.¹⁹

This is, at least, the contention of J. Armiger Trollope, who argues—as do most historians of change-ringing—that while bells in the Middle Ages were “cast and hung for the sole use of the Church and for the glory of God,” change-ringing developed as a “purely secular sport...entirely divorced from the service of the Church.”²⁰ But the religious role of bells is amply present in early accounts of change-ringing, as I shall presently demonstrate, and the dissolution of a few monasteries did not turn England into a secular state. By instating himself as the head of the Church of England, in fact, Henry VIII essentially institutionalized English

¹⁶ Cook, p. 30.

¹⁷ *Ibid.*, p. 31.

¹⁸ *Ibid.*, p. 35.

¹⁹ William T. Cook, “The Organisation of the Exercise in the Seventeenth Century,” in Sanderson, p. 72.

²⁰ Trollope, p. 3.

Christianity as a national phenomenon. By abolishing Catholic ritual, he also created the need for a new means of religious expression. Break with the pope meant the vilification of every elaborate Catholic custom, from the worship of saints to the adornment of churches to the performance of religious music. Ringing, however, being perhaps sufficiently abstract or sufficiently unique to the British Isles, did not come under the axe. Although monastery bells were generally melted down, most churches were preserved under the king's jurisdiction, and the ecclesiastical overhaul that accompanied this shift in power often involved the installation of new bells or the refitting of old ones.²¹ This went on through the reign of Edward VI, who, during his short time as king, actually commissioned a nationwide survey of church bells, which is the source of most of our information about this period.²² The new bells were usually fitted with half- or even three-quarter-wheels, and—unprecedentedly—hung in larger groups of five or seven, meaning the end of medieval dead-chiming and the beginning of an era of unprecedented ringing potential. Moreover, they were inscribed not with the Latin saints' names of earlier centuries but with English invocations to praise God and king, the Bible's command to "praise him on the loud cymbals" being a particular favorite.²³

Perhaps because of this comforting association, as well as because of the abstractness of their role in worship (no gaudy pictures of saints are involved in ringing), bells thrived through the century's religious purges, embraced as a loud affirmation of the strength of the monarchy and the providence of God. In the new religious climate in which "man was justified by faith alone," a device whose far-reaching sound might turn "the heart of the worshipper towards God"

²¹ Morris, p. 25. See also Eisel, p. 22.

²² Sidney Joseph Madge, *Moulton Church and Its Bells* (London: Elliot Stock, 1895), p. 28.

²³ Henry Thomas Ellacombe, *The Church Bells of Gloucestershire* (Exeter: William Pollard, 1881), Appendix A.

must have seemed a worthwhile investment.²⁴ By 1552, the proliferation of new bells was such that Bishop Latimer claimed that “if all the bells in England were rung at one time, there would be scarcely a single spot where a bell would not be heard.”²⁵ It was at this time that ringing’s connection with decay was weakened; the Injunctions of 1551, intended to curb customs redolent of Catholicism, actually forbade “knells or forthfares” at the occasion of death.²⁶ While bells were still rung for illness, enabling John Donne instructed his readers to “ask not for whom the bell tolls,” this was done “to solicitate the hearers of the same to pray for the sick person,” rather than to mark impending death.²⁷ This de-emphasis of negative change made room for the more positive and complex message propagated by early change-ringing—a message that, thanks to the abundance of bells on which to perform it, could have a uniquely large audience.

This is not to say that the developments in ringing in the seventeenth-century arose naturally out of what had gone before. In pre-seventeenth-century terms, there was nothing more to develop; men had already mastered the exercise of ringing bells up and down in order.²⁸ After the turn of the seventeenth century, however, this paradigm shifted. From the first primitive rearrangements of rounds, the impulse to impose mathematical control on the chaos of church bell ringing gained force and complexity with astonishing speed. Stedman and Duckworth marvel at this at the very opening of *Tintinnalogia*, the first ringing textbook, published in 1668:

It is an ancient *Proverb* with us in *England* (That *Rome* was not built in a day) by which expression is declared, That difficult things are not immediately done, or in a short time accomplished: But for the *Art of Ringing*, it is admirable to conceive in how short a time it hath increased, that the very depth of its intricacy is found out; for within these Fifty or Sixty years last past, *Changes* were not known, or thought possible to be *Rang*: Then

²⁴ Christopher Hill, *Change and Continuity in 17th Century England* (London: Littlehampton, 1973), pp. 83, 87-88.

²⁵ Morris, p. 25.

²⁶ Cook, “Development,” p. 34.

²⁷ *Ibid.*

²⁸ See Trollope, p. 9, for early rules established to make this exercise more challenging.

were invented the *Sixes*, being the very ground of a *Six score*: Then the *Twenty*, and *Twenty-four*, with several other *Changes*. But *Cambridge Forty-eight*, for many years, was the greatest *Peal* that was *Rang* or invented; but now, neither *Forty-eight*, nor a *Hundred*, nor *Seven-hundred and twenty*, nor any Number can confine us; for we can *Ring Changes, Ad infinitum*.²⁹

Apart from providing evidence of what Julia M. Walker perceives as a poetic fascination in the late Renaissance with numbers as “reliable points of reference in an age of...great intellectual flux,”³⁰ this passage aptly articulates the focus and ferocity of change-ringing’s early developments. What was necessary for those developments was an exhaustive interest in change and circularity, and specifically an interest in the ways human ingenuity could be used to express such abstract concepts. Paradoxically, the new separation of ringing from religious duty allowed for experimentation that would soon result in an effective experiential mimesis of a religious idea: the providential progress away from and toward divine order. As I shall demonstrate, the notion of cyclical change was being debated at the time by England’s scientists and philosophers, and contemporary poets were already experimenting with a similar kind of structural mimesis. As a sensory expression of Christian doctrine and contemporary philosophy, change-ringing has a visceral directness that makes its study fruitful for the understanding of similarly mimetic contemporary poetry. I shall explain presently the exact incarnation of that doctrine and philosophy in ringing and in poetry. First, however, I shall attempt to explain the exact sequence of the developments that Stedman and Duckworth describe.

²⁹ A Lover of that Art, *Tintinnalugia: Or, the Art of Ringing* (London: Thomas Archer, 1671), p. 2. Though no names are given in the first edition, the authors of this work are known to have been Fabian Stedman and Richard Duckworth.

³⁰ Julia M. Walker, “Donne’s Words Taught in Numbers,” *Studies in Philology* 84, no. 1 (1987): 44-60, p. 44.

4. Change-Ringing in the Seventeenth Century

Because it was some time before the terms and standards of change-ringing began to be defined and documented, it is impossible properly to trace its early development. Ernest Morris, writing in 1931, acknowledged this uncertainty, but suggested that “about the beginning of the seventeenth century the minds of ringers began to open to the possibility of ringing a number of variations on several bells, each variation being merely repeated once, or at most twice, consecutively.”³¹ In the passage quoted above, Stedman and Duckworth claim that changes were unknown “within these Fifty or Sixty years last past,” and in 1923, Herbert Drake cited this assertion in *Ringing World* in response to an inquiry about the earliest record of change-ringing, adding that “it is pretty certain that Stedman knew what he was talking about.”³² In 1600, then, change-ringing was unthought-of; by 1700, peals had been scored, societies had sprung up across the country, and several major books had been published on the subject. Ringing had even featured in a 1684 book called *The School of Recreation*, which cited it along with hunting, fowling, tennis, and other healthy gentlemanly pursuits, and particularly commended the “excellent harmony of music” and “mathematical inventions delighting the mind” of anyone so fortunate as to be “esteemed an elaborate and ingenious ringer.”³³

Significantly for this investigation, the first extant printed mention of change-ringing itself comes not from a textbook or a performance record but from a sermon published in 1614, containing the phrase, “Some ring the Changes of opinion.”³⁴ This figure of speech must therefore have been widely understood at the time, meaning that change-ringing was already somewhat established, at least in Bedfordshire, where the sermon was given. Meanwhile, the

³¹ Morris, p. 27.

³² *The Ringing World*, 26 October 1923, Letters Section.

³³ Morris, p. 55.

³⁴ John C. Eisel, “The Development of Change Ringing in the Seventeenth Century,” in Sanderson, p. 40.

experts at *Ringing World* have traced the earliest record of changes themselves to a doorjamb in the ringing chamber at Buxhall Church in Suffolk, where have been engraved “the ‘plain changes’ on four bells with the tenor covering,” signed “John Gooch, Bellringer,” between 1580 and 1620.³⁵ As to the specific chronology of ringing developments, the best source is still Stedman and Duckworth’s whirlwind history: “Then were invented the *Sixes*, being the very ground of a *Six Score*: Then the *Twenty*, and *Twenty-four*, with several other *Changes*. But *Cambridge Forty-eight*, for many years, was the greatest *Peal* that was *Rang* or invented.”

Too detailed an explanation of these early changes would be out of place here, especially as Stedman and Duckworth themselves dismiss them as merely the preliminaries to the great recent developments in method ringing. A brief summary of the basic concepts will suffice. The Six Score, the Twenty, and the Twenty-Four were all species of plain changes, in which only one pair of bells switched places at each change. Generally this was done by designating one bell as the hunt (usually the treble) and several others as the extrems; while the hunt “hunts up and down continually, and lies but once in one place, except only when it comes before or behind the Bells, at which time it lies there twice together,” exactly after the fashion of modern hunting, the extrem made “a *Change* every time the *Hunt* comes before or behind them.”³⁶ There was no thought, at this time, of each bell following a specific path; there was merely the hunt and all the other bells that sought to accommodate it, including, occasionally, half and quarter hunt bells, which made a shorter journey than the whole hunt.³⁷

³⁵ *The Ringing World*, 26 October 1923, Letters Section.

³⁶ *Tintinnalugia*, p. 8. The plain changes on four bells are as follows: 1234, 2134, 2314, 2341, 3241, 3214, 3124, 1324, 1342, 3142, 3412, 3421, 4321, 4312, 4132, 1432, 1423, 4123, 4213, 4231, 2431, 2413, 2143, 1243, 1234.

³⁷ Cyril A. Wratten, “Changing Concepts,” in Sanderson, p. 13. See also *Tintinnalugia*.

These principles could be expanded to accommodate the Six-Score on five bells and even the 720 on six bells, but on anything above four bells they became “both difficult to ring and monotonous,” and because monotony did not sit well with the ringers’ fascination with change, they “very soon gave way to Cross Peals in which the movement was shared by all the bells,” producing a maximum of variety at every change.³⁸ Cross peals, such as the early Grandsire Doubles (composed c. 1650) and Grandsire Bob, opened the door to a world of faster and more varied changes, and necessitated the development of new strategies for learning and conducting peals.³⁹ The *Campanalogia Improved*, in 1702, was the first text to advise the initial learning not of a peal but of the underlying method, with the effect of bob calls learned at a later stage. This “plain course plus bobs” school of ringing (which is the way modern methods are learned) increased the importance of the conductor, who was depended upon to call out the necessary bobs and singles, and whose “responsibility for the accuracy and truth of the ringing” increased accordingly.⁴⁰

As for the actual labor of ringing these changes, it bore little resemblance to the modern system of ropesight and line memorization. Stedman and Duckworth encourage ringers on the extream bells to “mind and observe the motion of the hunt, that they may the better know when to make the extream changes,” and further suggest that the ringers on the whole and half hunts may “give notice of the extream changes (by saying *Extream*) the change next before the extream is to be made,” just in the manner of a modern ringer calling a bob or a single, although rather more frequently. No sense of the larger pattern of motion was required, as long as the hunt knew what he was doing. The key to knowing one’s place in a mid-seventeenth century ringing

³⁸ Trollope, p. 10.

³⁹ Ibid.

⁴⁰ Wratten, p. 16.

chamber was not watching, as it is today, but listening; ringers were expected to be able to hear where the hunt bells were and to change their own positions accordingly.⁴¹ The Twenty All Over, for example, was popular perhaps because of the obvious “aural simplicity” of changing position only when the previous bell has arrived at the back of the change. Cyril A. Wratten posits that “the ringing of bells in England was at this period associated much more closely with music making than it has ever been since,” citing *Tintinnaloga*’s mention of instrument-tuning and the use of the word “pricking,” which traditionally meant writing out a musical score, to describe writing out a series of changes.⁴² Many of the ancient poems and rules in ringing chambers stress the importance of good listening, such as the Scotter belltower’s invocation to “ring well with hand and eare, / Keep stroak of time and goe not out.”⁴³ This is evidence that the *sound* of changes, in the seventeenth century, was uniquely important; ringers were focused on the aural experience of ringing, perhaps because this was what could be propagated to listeners outside the belltower. Certainly the sound of change-ringing is a striking one, and its effect on the seventeenth-century listener—accustomed to the dreary sound of passing bells—must have been exciting enough that it was some time before the aural experience of ringing ceded priority to the mental one.

This shift eventually occurred because, while listening has remained a central attribute of good ringing, it is not a sufficiently quick way to find out what is going on and what must be done next, and early ringers’ dependence on it “must have had a decisive effect upon the extent to which plain changes could be developed.”⁴⁴ The very survival of so much plain-change graffiti on ringing chamber walls points to the ringers’ need to “have their ‘music’ before

⁴¹ Ibid., p. 5.

⁴² Ibid., p. 6.

⁴³ Cook, “Organisation,” p. 69.

⁴⁴ Wratten, p. 5.

them.”⁴⁵ Towards the end of the century and the beginning of the next, method lines would take the place of the system of hunts and extreams, and ringing by ear would be replaced by ringing by sight, with every ringer conscious not only of his place in the change but of the larger-scale path he was following and of the particular bells surrounding him at every moment. But until visual ringing was developed, change-ringing was a slow business; Stedman and Duckworth recommended “walking,” or waiting several rounds before moving to the next change, as a way to accommodate ringers who didn’t know what they were doing, and they marveled at the London ringers who commonly ring half-pull (changing at every stroke, as in modern ringing, rather than at handstroke only, as was traditional) “with so round and quick a Compass, that in the space of half an hour, or little more, the 720 Changes are Rang out from beginning to the end.”⁴⁶

The London ringers in question were probably the Society of College Youths, of whom Stedman was a member. Ringing societies had been springing up around England for decades, most of them small-town groups whose arcane rules served mainly to extract money from their members. The St. Stephen’s Ringers, for example, established around 1620, specified a fine of twopence for any member who “shall be so saucy as to take a rope to ring before the Master for the time being and the eldest of the said Company who have been Masters shall be settled where they shall please to ring,”⁴⁷ illustrating the solemn hierarchy of age and merit within such societies. Drinking, cursing, and overthrowing one’s bell (in the days before stays) merited higher fines. In larger cities, the societies tended to be both more socially elitist and more focused on accomplished ringing. To join the Esquire Youths, an early London society, a “round

⁴⁵ Ibid., p. 8.

⁴⁶ *Tintinnaloga*, p. 55.

⁴⁷ Cook, “Organisation,” pp. 73-74.

ringer” had to pay 4s 6d, whereas a “Sixscoreman” only had to pay 1s 6d, although attendance, obviously, was restricted to esquires and above; intriguingly, it was also forbidden to talk politics, although the members of such an aristocratic London society, as well as of its successor, the Society of College Youths, were almost uniformly royalists.⁴⁸

The CY, founded in 1637, consisted mainly of landowners and civil servants, who, when the Civil War broke out, “joined the King’s standard or went down to their country homes to help his cause;” several were also imprisoned.⁴⁹ The war did not curtail ringing, however; the CY enjoyed better recruitment numbers during the war years than at any other time during the society’s first hundred years.⁵⁰ One of eleven members to join in 1654 was John Milton’s younger brother Christopher (a royalist who had depended on his brother to save his estate from the rebels).⁵¹ When Charles II was restored in 1660, the bells rang out to mark the occasion, and ringing continued to be encouraged by the new government. In fact, ringing’s ties to the monarchy appear to have been at least as strong as its ties to the church. In the royalist poet Abraham Cowley’s “On his Majestie’s returne out of Scotland,” for example, the “merry Bells” are urged to “Ring without helpe of *Sexton*, and presage / A newmade holyday for future age”—not a religious holiday for an age of Christian virtue, but a political one for an age of royalist stability. Peals continued to be rung for royal visits, weddings, and coronations at least as often as they were rung for Easter or New Year’s; one of the earliest documented methods, now seldom rung, was known as “Restoration Triples.”⁵²

⁴⁸ Ibid., p. 76, and Trollope, p. 8.

⁴⁹ Trollope, p. 8.

⁵⁰ Ibid., p. 10.

⁵¹ Joseph Milton French, *The Life Records of John Milton* (London: Gordian Press, 1966), pp. 157-158; Trollope, 11.

⁵² John C. Eisel, “Campanalogia,” in Sanderson, p. 62.

This association with the monarchy was only strengthened by the royalist College Youths' indisputable preeminence. The CY surged to the end of the seventeenth century at the forefront of every new development in ringing, whether that were a particularly long extent, an unprecedented number of bells, or a complicated new method. Many of these early records are disputed, particularly because records of peal compositions were generally not kept, and on the occasions that they were kept the peals were often later proven false.⁵³ The trend, however, was one of continuous innovation and exploration. In 1684, they rang three successive 720s, the longest performance yet; in 1690, they recorded having rung a peal (in the modern sense) on eight bells, although no true peal of the method in question had yet been composed.⁵⁴ It was during this time that Milton's nephew and pupil, John Phillips, joined the society,⁵⁵ although he had by this point betrayed his uncle's teachings and authored a book of ribald Cavalier poetry.⁵⁶

In the next century, change-ringing would experience phenomenal growth, with new methods devised and peals composed (and occasionally proven false) with astonishing frequency. The groundwork for modern ringing had been laid, and all that was left for ringers of the next centuries was the labor—no mean one—of expanding and improving on the catalogue of ringing feats. But the invention of change-ringing itself was a uniquely seventeenth-century phenomenon. It rose out of the same impulse that drove the century's cataclysmic innovations in art and literature: an impulse, inspired by the renunciation of Catholicism and by scientific discoveries that challenged the traditional model of the universe, to find ways of asserting

⁵³ See particularly the episode surrounding the false peal of Grandsire Triples, discussed in Wratten, p. 55.

⁵⁴ Trollope, p. 26.

⁵⁵ "List of Members: 1637-1699," Ancient Society of College Youths, accessed April 22, 2012, www.ascy.org.uk/mem1637-1699.htm.

⁵⁶ Barbara Lewalski, *The Life of John Milton: A Critical Biography* (London: Blackwell, 2002), p. 336.

religious stability in “an age of disillusionment” and melancholy.⁵⁷ In the face of human fallibility, the participants in this aesthetic movement asserted a divine plan; in the face of earthly decay, they asserted the essential necessity of providential change. These motives are consistent with the struggle for divine understanding that has characterized the whole history of Christian thought. In the seventeenth century, however, this struggle intensified, thanks to scientific and political developments that put unprecedented pressure on traditional static concepts. Most unique to this era is the way in which artists and thinkers strove to illuminate abstract concepts through their own ingenuity, creating an experiential model of divine order in earthly change, based around the concept of the moving circle, in order to impart to their audience an understanding of and faith in Christian providence.

5. Contemporary Concepts of Change and Circularity

The seventeenth century began in the shadow of earthly decay. The beginning of Edmund Spenser’s *Mutabilitie Cantos*, composed probably in 1598 or 1599, captures this atmosphere with its description of change as a force of destruction, “pervert[ing]” the “good estate” and “meet order” of things established by nature and making “them all accurst / That God had blest.”⁵⁸ This primitivist concept of change was not entirely new, and nor was it the only model in play at the beginning of the century—indeed, it is overturned by the end of the *Mutabilitie Cantos*—but recent scientific discoveries of decay and upheaval in the universe had given it force; it was no longer so easy for men to take comfort in the “still happy state” initially provided by God (vi 5.9), because there was more concrete evidence that that state did not exist. At the

⁵⁷ George Wesley Whiting, *Milton’s Literary Milieu* (New York: Russel and Russel, 1964, p. 129.

⁵⁸ Edmund Spenser, “Two Cantos of Mutabilitie,” in *The Faerie Queene*, 2nd ed., ed. A. C. Hamilton et al. (London: Longman, 2006), VII vi 5.2-4 and vi 5.7-8. Hereafter citations of the *Mutabilitie Cantos* are given parenthetically by canto, stanza, and line number.

beginning of the century, refinements in the development of the telescope allowed Kepler to observe the first documented new star in a cosmos previously thought to be the realm of perfect constancy; Galileo followed this with his discovery of sunspots, which were interpreted as signs of decay on the heretofore-thought-perfect sun.⁵⁹ Copernicus's heliocentric model of the universe, albeit a hundred years old, was gaining ground in the popular consciousness, resulting in a more widely-held conviction that not only were the stars changing but the earth itself was constantly in motion. The scientists and philosophers of the seventeenth century were tasked with finding evidence of order and of God's providence in "a universe more complex and less static" than previously imagined.⁶⁰

Marjorie Nicolson has persuasively argued that the result of this scientific upheaval was the destruction of every comforting, static model the Elizabethans had held dear.⁶¹ "New Philosophy" really had, as Donne put it in his First Anniversary, "call[ed] all in doubt;"

The Sun is lost, and th'earth, and no mans wit
Can well direct him where to looke for it.⁶²

A new model of experience was therefore required. The seventeenth century was characterized by the quest for such a model: one that would express all the grand vicissitude of the newly-apparent universe without losing sight of God's influence in all things, using the very human

⁵⁹ George Williamson, "Mutability, Decay, and Seventeenth-Century Melancholy," *ELH* 2, no. 2 (September 1935): 121-150, p. 123.

⁶⁰ Magne Malmanger, "Between Renaissance and Baroque: Attitudes to Nature and the Concept of Nature," in *Contexts of Baroque: Theatre, Metamorphosis, and Design*, ed. Roy Eriksen (Oslo: Novus Press, 1997), p. 29. See also Charlotte Methuen, "Special Providence and Sixteenth-Century Astronomical Observation: Some Preliminary Reflections," *Early Science and Medicine* 4, no. 4 (1999): 99-113, which discusses the similar effect of new science on the concept of Christian providence in sixteenth-century Germany.

⁶¹ Marjorie Nicolson, *The Breaking of the Circle* (New York: Columbia University Press, 1960).

⁶² John Donne, "An Anatomie Of The World—The First Anniversary," in *The Complete Poetry and Selected Prose of John Donne*, ed. Charles M. Coffin (New York: Modern Library, 1952), pp. 186-197, ll. 205-208.

ingenuity that had exposed that vicissitude in order to better comprehend it. The model that was hit upon, and which can be traced through the poetry, philosophy, and music of the age as well as through change-ringing, was one of orderly structure underlying circular change.

First, however, there was a flurry of despair, as poets and philosophers resigned themselves to a reality of perpetual decay. Back in the sixteenth century, in his *History of the World*, Sir Walter Raleigh theorized that the Biblical patriarchs had been the best and longest-lived men because they were “nearer to ‘the first and purest seed,’” and that successive generations had been increasingly degenerate.⁶³ In 1616’s *The Fall of Man*, Godfrey Goodman, former chaplain to Elizabeth I, cited the condition of the heavens, the evil inherent in nature, and the world’s abundant imperfections to prove that nature was “corrupted, and much declined from her first perfection, which certainly was intended by the founder.”⁶⁴ This distinction between God’s intention and the current reality is crucial. Man was perceived to be going in a direction contrary to the divine plan, and the gap between God and man, growing since the first days of Creation, was indicated by a growing sense of decline and disorder in the mortal world. This attitude is present in Donne’s First Anniversary, which indicates that death is a welcome escape from the earth’s decline. But a more positive idea of change was also taking hold, inherited from previous centuries but given energy by the same atmosphere of technological advancement that resulted in full-wheel ringing. This idea linked earthly decay with progress and heavenly constancy through the use of the core image of change-ringing: the circle.

Circularity in change-ringing exists on several levels. There are the two large circles formed by the people in the ringing-chamber and the bells above them; there is also the circle of

⁶³ Williamson, p. 139.

⁶⁴ Godfrey Goodman, *The Fall of Man, or the corruption of nature, proved by the light of our naturall reason* (London: Felix Kyngston, 1616), 26.

each bell's wheel, and the cyclical movement of handstroke and backstroke performed by each ringer. There is the word "rounds," to describe the basic order of the bells, and the circle each bell enacts in its periodic return to its original position within the sequence. Most crucially, there is the great circle enacted by the work of change-ringing itself in the symmetrical move from rounds into disorder and then back to rounds, guided by the overarching principle of the method and the specific commands of the conductor. It is this kind of performed circle that was taken up by seventeenth-century thinkers in answer to the charge of perpetual decay, positing a cycle of earthly change that would eventually end with the ascension to heaven.

George Hakewill fleshed out this concept in his *Apologie of the Power and Providence of God* (1627), which directly rebuts Goodman's argument with an "optimistic defence of providence."⁶⁵ Hakewill casts himself as the redeemer of "a captivated truth" and the vindicator of the Creator's honor, setting out to prove that God's plan had not consigned mankind to eternal decay.⁶⁶ To Goodman's claim that mankind itself was deteriorating, Hakewill argues that men's traits vary only "so as by a vicissitude and revolution they returne againe to their former points;" all things that change "againe decline, and againe returne, by alternative and interchangeable courses."⁶⁷ With regard to the motion of heavenly bodies, he concludes that they must be moved by angels, whom he characterized as constant, "indefatigable and unerring guides."⁶⁸ He further cites the regular cyclic motion of the tides, moon, and sun, and invokes the image of a wheel, which "at every turne, bringeth about all his Spokes to the same places, observing a constancy even in turning," and concluded that "though there be many changes and variations in the World,

⁶⁵ Ronald J. VanderMolen, "Providence as Mystery, Providence as Revelation: Puritan and Anglican Modifications of John Calvin's Doctrine of Providence," *Church History* 47, no. 1 (1978): 27-47, p. 36.

⁶⁶ George Hakewill, *An Apologie of the Power and Providence of God in the Government of the World* (Oxford: Lichfield and Turner, 1627), p. 12.

⁶⁷ *Ibid.*, p. 37.

⁶⁸ *Ibid.*, p. 58.

yet all things come about one time or another to the same points again.”⁶⁹ The parallels between this model and change-ringing are gratifyingly obvious: the wheel, the changes and variations, the alternation of rise and fall, and the constancy due to unerring guidance seem a philosophical synthesis of the theory and sensory experience of change-ringing.

In themselves, the ideas of earthly cyclicity and circular perfection date back at least to Plato.⁷⁰ They were elaborated upon in the second half of the fifteenth century by Marsilio Ficino, an Italian Neoplatonist who, in works such as his eighteen-book *Platonic Theology*, used the image of a circle to theorize a static, perfect God overseeing a moving hierarchy of being.⁷¹ Ficino’s ideas proceeded to gain ground in early modern England, particularly in the seventeenth century among the Cambridge Neoplatonists, such as Henry More, who saw the aim of “all Religious Mysteries” to be “the bringing back fall’n man into his pristine condition of Happiness,” and who asserted that “*all things are ordered for the best purpose and greatest happiness of the Creation.*”⁷² With this emphasis on progress came a reworking of Ficino’s circles, in which the circular movement of the soul became not evidence of distance from God but rather a way of approaching him. Perhaps encouraged by advances in technology and medicine, thinkers of the seventeenth century began to conceive more prevalently of change in positive terms, with an eye to its eventual goal of eternal constancy. The gradual beginnings of this shift are visible in the *Mutabilitie Cantos*, written in the years before the concept of positive circular change really took hold. After describing the destruction wreaked by “Proud Change,” Spenser concedes that cyclic change is present in all things, and is in fact sanctioned by nature as

⁶⁹ Quoted in George Williamson, *Seventeenth Century Contexts* (London: Faber and Faber, 1963), p. 16.

⁷⁰ See Nicolson, pp. 47-57.

⁷¹ Marsilio Ficino, *Platonic Theology*, trans. Michael J. B. Allen, 6 vols. (Cambridge, Mass: Harvard University Press, 2001-2006), vol. 1, pp. 79-91 and 231-247.

⁷² Henry More, *The Theological Works of the most Pious and Learned Henry More* (London: Joseph Downing, 1708), pp. 2, 23.

a way by which earthly phenomena can “worke their owne perfection” and eventually achieve eternal rest with God (vii 58.9, viii 2.7-8).

The Neoplatonists, like the medieval mystics before them, asserted the inherent inscrutability of these divine mysteries. The belief that human minds, “through their very dulness,” are unable to comprehend the “inscrutable wisdom” of providence still held sway, particularly among the growing sect of Puritans.⁷³ But the seventeenth century also saw an increased effort, if not to understand those mysteries, at least to map and express their effect on the known world, closing the gap between “the eternal perfection of circularity and the linear extension of space and time.”⁷⁴ In science, this trend was facilitated by the invention of the telescope, which allowed astronomers to delineate the change underlying celestial circularity, and the patterns underlying that change, shedding new light on the complex order prescribed by divine providence. Not only did scientific advances increase understanding of change, they relieved it of its purely negative connotations; as Spenser had hinted, change was not a purgatory that would be ended by the Resurrection, but a vital engine of God’s making moving man toward that end, and one in which man could and ought to rejoice. With the help of the circle, change became a way of approaching God, rather than a symptom of inevitable withdrawal from him.

In a religious context, the ramifications of this shift are plainest in Donne’s sermons of the 1620s, which employ circularity to emphasize the essential and inevitable unity of man and God, rather than the distance between them. In these sermons, circularity becomes a way not of standing still but of moving forward, and, specifically, of approaching God. Donne reads spiritual progress into earthly circularity by drawing a parallel to the traditional circular concept

⁷³ John Calvin, *Commentary on the Book of Psalms*, trans. James Anderson, 5 vols. (Grand Rapids: University of Michigan Press, 1955), p. 444. Quoted in VanderMolen, p. 33.

⁷⁴ John Freccero, “Donne’s ‘Valediction: Forbidding Mourning,’” *ELH* 30, no. 4 (December 1963): 335-376, p. 336.

of God, which had been around throughout the Renaissance. According to Donne, God's circularity is an active force on man's: "God is a circle himselfe, and he will make thee one."⁷⁵ Man's circle, moreover, is one of "continuall change, and mutation," beginning at baptism and continuing through death, after which "the circle is carried up to the first point againe, to our Birth, in another Birth, in the Resurrection" (VII, 164). The concepts of earthly cyclicity and a traditional circular God have been run together, so that "the whole Circle of a Christian" comprehends not only earthly vicissitude but eventual salvation (VII, 164). The effect is both to sanctify earthly circularity and to prefigure the eventual move toward the stabler circle of divinity. Both circles are parts of God's plan, and the earthly circle, by virtue of its very analogous circularity, leads into the heavenly one.

This resonates strongly with the role of circles in change-ringing, in which two harmonious, stable circles—familiar from Plato and Ficino—bookend the progression of change. Donne's animation of the static circle, in both earthly and heavenly terms, parallels the historical move from round-ringing into changes as a more complete model of spiritual progress. In this way, the apparently negative phenomenon of earthly change becomes an affirmation of the continuous circle connecting God and man. But Donne's model is more complex than a mere circle, and consequently even closer to the action of change-ringing, which is circular in many ways, but linear at the level of each bell's progress along the method line. In concordance with this action, Donne adds to the circularity of earthly progress the directness of God's influence. "God is verticall," accessible to each of us by "a direct line;" he leads us "from our *beginning*, through all our wayes, to our end" (VII, 245). Despite the holistic circularity of man's progress,

⁷⁵ John Donne, *Sermons*, 10 vols., ed. George Reuben Potter and Evelyn Mary Spearing Simpson (Berkeley: University of California Press, 1953), vol. VII, p. 175. Hereafter references to this work will be given parenthetically by volume and page number.

the effect of God's guidance is always linear. A Christian following God's influence moves along a method line, in straight and systematic turns that aggregate to a larger circular progression. Like ringing, Donne's world is a parallel fusion of circular and linear motion, enacting a progress down through the changeful earthly circle and up to the stable perfect one of Christian divinity, synthesizing "the linear extension of time and space with the circularity of eternity,"⁷⁶ and adding linear certainty to the empirically evident circularity of the natural world.

In his theoretical writing, then, Donne has given us an example of the way the seventeenth-century Christian might—and did—use the concepts of circularity and change to assert the strength of God's providence amid looming evidence of earthly decay. But the most distinctive quality at play in the work of Donne and his contemporaries, and in change-ringing, is the direct experiential enactment of the ideas being propounded. The same advances in technology that encouraged scientific discovery and gave the lie to notions of perpetual decay also contributed to a prevalent faith in intellectual experimentation, which is evident in the seventeenth century's efforts at the ingenious concrete simulation of abstract concepts. In this aesthetic mode, a piece of art was designed to impart a particular idea not only through the figurative or abstract presentation of that idea, but through careful structural mimesis of the idea itself, so that the reader, viewer, or listener could experience the very qualities being described. Magne Malmanger describes this impulse as a "bold attempt at rational control in a world of new and undreamed of complexity," characterized by "a taste for movement, variety and, not least, strong expression...controlled and disciplined by some overriding formal principle."⁷⁷

⁷⁶ Freccero, p. 339.

⁷⁷ Malmanger, p. 32.

This attitude is a hallmark of baroque architecture, in which illusive ceilings and heavy pillars mimic the effect of God's power and grandeur;⁷⁸ it is also arguably a hallmark of baroque devotional music, such as Bach's, which is characterized by elaborate counterpoint and complex harmony that echo the intricacy of God's plan. It is already present in the rhetorical style of Donne's sermons, which echoes the productive circularity of providence by moving in circles where each return to a given motif "brings new insight or at least a renewal of vision" to the question at hand,⁷⁹ and it is perhaps the most prominent characteristic of Donne's famously inventive poetry, along with that of Herbert and especially of Milton. For the clearest explication of this technique, however, we may turn to the literature written to explain the principles of change-ringing itself.

6. Ringing Poems

The explicit ideology of change-ringing is not found in its theoretical texts, which focus on the practical task of enumerating changes; it is also absent from philosophical histories, as a "gentleman's exercise" such as ringing does not generally attract careful analysis. To learn more about the ideas specifically associated with early ringing, we must enter the rather less exalted world of ringing poems. These poems were inscribed on the walls of ringing chambers, engraved on bells, painted on peal-commemoration plaques, and included in the front matter of early ringing texts such as *Tintinnalogia* or *Clavis Campanalogia*; they address the religious and political purposes of ringing and the challenges endemic to it, as well as touching on the more practical concerns of bell handling and alcohol consumption. Although many ringing poems,

⁷⁸ Murray Roston, *Milton and the Baroque* (London: Macmillan, 1980), pp. 19-27.

⁷⁹ Michael L. Hall, "Circles and Circumvention in Donne's Sermons," *Journal of English and Germanic Philology* 82, no. 2 (1983): 201-214, p. 209.

such as the anthemic “Bellringers’ Hymn” and William Woty’s Miltonesque “Campanalogia,”⁸⁰ would not be written for at least another hundred years, the imagery and substance of those more elaborate works are already present in the poems of the seventeenth century. The predominant agenda of these poems is to explicate the active analogy between bells and men as generators of Christian praise and participants in the orderly circle of providential change. In structure and style, the poems themselves are blithely ordinary, but they provide an unparalleled insight into the genuinely intentional mimesis involved in the act of ringing itself. It is rather as if Donne had written poems explaining his poems, and, to an investigation of the underlying philosophy of the arts in question, it is equally illuminating.

One of the most persistent qualities of these poems is the analogy between bells and men. This analogy is compelling for several reasons. Each bell is operated by one man, and in many old-fashioned belltowers, the same man operated the same bell throughout his ringing career; one still occasionally hears of a man who “pulled the tenor at St. Mary’s for thirty years.” Moreover, in the conceptualization of method ringing, the ringer and the bell are often conflated; when one is told to ring “over the three,” the number refers to the bell, of course, but also to the ringer operating it, at whom one will look in order to know when to ring. Knowing one’s place within a change is a matter of reading eye contact and body language as much as one of counting or memorization, particularly for the novice. There is also, in contrast to ringing in the Middle Ages, the active role of the bell in proceedings; rather than hanging still, bells move so violently that the tower often shakes in a constant reminder of their presence. Finally, there is the traditionally anthropomorphic vocabulary surrounding the bells themselves, which have waists and mouths and tongues and are traditionally referred to by feminine pronouns. In the early

⁸⁰ See John James Raven, *The Bells of England* (New York: E. P. Dutton & Co., 1906), pp. 298-302. Raven dates Woty’s poem to 1761.

Middle Ages, bells were consecrated and given saints' names in a ceremony akin to baptism, and although this practice was banned as sacrilege in 780,⁸¹ most prominent bells are still referred to by (paradoxically male) names, with Big Ben in London being perhaps the most famous example. In a poem written to commemorate the recasting of Oxford's Great Tom in 1612, Richard Corbet actually describes in detail the bell's emotions on the way to the foundry.⁸²

The analogy between bells and men is invoked via personification in many of the briefer bell inscriptions: "Samuel Keene made me," for example, or the more fanciful "Come when I call to serve God all."⁸³ In longer works, however, this analogy is extended, allowing the attributes of the bells to speak for similar attributes of men, and thus providing insight into the nature of men as well as the nature of ringing. One prominent attribute under consideration is the tendency of men and bells to change. A poem from the early eighteenth century claims that men's vicissitude has inspired a parallel vicissitude among bells: "Unconstant fickle men who love: Through every scene to range: / Their own example to approve: Have taught us bells to change."⁸⁴ The question of change-ringing's inspiration is rendered here as one of direct mimesis: bells are taught their fickle ways by men, in whom changeability is inherent. This would have resonated particularly at the time of change-ringing's development, when the changeability of men and the human world was underscored by political and scientific upheaval.

But this parallel is not merely etiological; it also serves a didactic purpose to the very men participating in it. The laws governing the bells, and the order into which they eventually fall, are a model for the behavior of men. The first prefatory poem to *Tintinnalogia* states that

⁸¹ Jones et al., p. xi.

⁸² Raven, pp. 293-295. The original manuscript is in the Ashmolean collection, 36 and 37, fol. 260-1.

⁸³ Ellacombe, pp. 34, 31.

⁸⁴ John C. Eisel, "Changing Attitudes to Bells and Their Usage," in Sanderson, vol. 2, pp. 22-23. The bell was cast for Bilston in 1745.

When Bells Ring round, and in their Order be,
They do denote how Neighbours should agree;
But if they Clam, the harsh sound spoils the sport,
And 'tis like Women keeping *Dover Court*,

and goes on to compare the “leading Bell” to “a valiant Captain in the Field,” whom the other bells must follow, as “the fault of one Bell spoils a Ring.”⁸⁵ Here, not only does the treble provide a model of good leadership, but the pleasing sound of order among bells is presented as an incentive to men to exhibit a similar order. John Bunyan uses a similar strategy in his poem “Upon a Ring of Bells,” in which he renders bells as an explicit cipher for the human soul, with the body corresponding to the steeple and human graces to the ringers, who, ringing changes well, “drown the tempting tinckling Voice of Vice” and cause the soul to “bounce and sing.”⁸⁶

This invocation of the soul in a moral context is a convenient transition to another aspect of ringing poems, which is the use of change-ringing as a bolster of Christian faith. In this context, God himself becomes an active participant, not only as the recipient of praise but as the guide of harmonious change. Order is frequently invoked as the conclusion of earthly vicissitude, as in the 1745 inscription, which states that after “First this then that then tother leads,” the bells finally “all come into place.”⁸⁷ The implication is that men, who have inspired the bells’ changeful behavior, are also destined to “come into place.” But in order for them to do so, a guide is clearly necessary, as an inscription in Bakewell, Derbyshire, indicates: “Mankind like Us, too often are found / Possess’d of Nought but empty Sound,” until the treble successfully leads the band “from Discord Free;” “Would Men Like Us join & agree / They’d live in tunefull

⁸⁵ *Tintinnalogia*, p. A4. The reference to “Dover Court” is to a court with “all speakers, no hearers” (William Bellenger, *A Dictionary of Idioms, French and English* [London: Sherwood, Gilbert and Piper, 1830], p. 268).

⁸⁶ John Bunyan, Isaac Watts, and Thomas Foxtton, *A Book for Boys and Girls, Divine Songs, and Moral Songs* (New York: Garland Publishing, 1978), pp. 36-38.

⁸⁷ Eisel, “Changing Attitudes,” p. 23.

harmony.”⁸⁸ This has the effect of asserting both the possibility of “tunefull harmony” among men and the necessity of guidance in order to achieve that possibility.

While this poem indicates that this role is partly filled by the treble (one must remember that the treble, as the primary hunt bell, essentially defined the progress of changes in early ringing), it is more traditionally filled by the influence of God, often in the role of the conductor. Bunyan invokes this trope in his plea to God to “keep [his] Belfry Key” from the abuse of “Lusts,” rendering God as a kind of steeplekeeper, responsible for enabling men to ring well (or live well, according to the analogy). The Bakewell poem continues in a somewhat similar vein, with a couplet popular on bell and tombstone inscriptions into the eighteenth century: “Thro’ Grandsires and Tripples with Pleasure men range, / Till Death calls the Bob & brings on the Last Change.”⁸⁹ Though death is the conductor here, rather than God, the two are related according to the Donne model of circular progress: death is a step on the way to reunion with God, and if the last change occurs after death, it may reasonably be equated with that reunion.

But the earliest example of a more complete picture of God’s place in the ringing analogy is found in the poetry written on several panels in the belfry of St. Nicholas Church in Gloucester, which dates back at least to the end of the seventeenth century. Here, God’s constancy is contrasted with earthly changeability; he is the unchangeable force that dictates change as well as the figure of eternal constancy to which all change is tending. After describing the peerless excellence of “a solemn peale of tunefull bells / Well runge,” the poet turns his attention to the greater significance of ringing:

Note here ye changes offer’d to your sight,

⁸⁸ John Charles Cox, *Notes on the Churches of Derbyshire*, vol. 2 (Chesterfield: Balmer and Edmunds, 1877), p. 43.

⁸⁹ Cox, p. 43. See also Eisel, “Changing Attitudes,” p. 23.

Which may be rung on Bells and thereby raise
Your thoughts to admiration and to praise
Such Musicke, and the Author of such skill,
Jehovah, who makes Changes as he will,
Within this Ringing I'land, and else-where,
Throug'ht the Vniverse, that men might feare
Him who hath Souerigne power, and in him trust
Who changeth not but turneth man to Dust.⁹⁰

The image of change turning men to dust is bleaker than the image of eventual harmonious order to which we are accustomed, more reminiscent of Spenser's destructive mutability than of Bunyan's bouncing and singing. But by inscribing these words in a room in which "tunefull bells" are to be "well runge," the poet implies the mitigation of this destructive force. Like the technological advances and laws of motion that took the sting out of celestial changeability, the skill and strategy involved in change-ringing shift the emphasis from destruction to advancement.

Moreover, the penultimate line, which asserts "trust" in God as a result of dictated change, brings a new detail into the picture. The purpose of this pageant of earthly change is at least partly to cement faith in the force that dictates it, presumably through a sense of the immense authority and comprehensive plan associated with that force. In the actual practice of change-ringing, such a faith is certainly necessary. The adherence to a set of unchanging method rules, modified in specific ways according to particular compositions, results in a nearly infinite array of entirely unique possibilities, of which only one set, in any performance, is ever actualized. The specific permutation performed depends on the guidance of the conductor, a ready analogue to "Jehovah, who makes Changes as he will." Utter change is governed by systematic constancy, and although the individual ringers, and certainly any external listeners, may not be aware of the conductor's specific plan—as humans are unable to "interpret God's

⁹⁰ Ellacombe, pp. 26-28.

‘end’ or ‘method’ by observing events”⁹¹—that plan undeniably exists. The successful performance of long and complex peals is enough to demonstrate that.

The spiritual equivalent of a successful peal is the completion of the progress from Creation to Resurrection, which has not been witnessed by any man and therefore cannot be held up as evidence that it is possible. This uncertainty creates a gap in human faith, which became particularly problematic after the Reformation made individual faith the center of Christian virtue. That gap is mimetically filled by the performance of change-ringing. This is the crux of change-ringing’s most famous poem, H. C. Wilder’s “Bellringers’ Hymn,” composed in the nineteenth century and sung at ringing society events to this day.⁹² This hymn unites all the aspects of the ringing analogy that I have so far discussed. It begins by addressing “Unchanging God, who livest / Enthroned in realms on high,” and who has bestowed on men the power “Thy name to magnify.” In the first stanza, “We” refers to the men who “raise the bells for ringing;” in the second, this distinction fades away, and the “we” who call “from tower and steeple,” “ring with joyous gladness,” and “peal in muffled sadness” could be the bells as easily as the men. The principle of harmony is invoked in the third stanza, which lauds the “union free and willing” of “a strong and steadfast band.” Finally, in the fourth stanza, we are given a neat summary of the spiritual analogy:

Our lives, like bells, while changing
An ordered course pursue;
Through joys and sorrows ranging
May all our lives ring true.
May we, through Christ forgiven,
Our faults and failures past,
Attain our place in heaven
Called home to rest at last.

⁹¹ VanderMolen, p. 31.

⁹² A full transcription of this hymn can be found at www.wirralbranch.org.uk/bellhymn.htm (accessed April 23, 2012).

The fact that this explication occurs in change-ringing's most famous poem is a testament to its ideological importance. Moreover, the close analogy between this explication and those of the poems I have discussed above shows that the religious messages of early ringing poems were not merely products of their time, but enduring abstractions of the central processes of change-ringing. Here, in an elaboration on the themes of the Bakewell and Gloucester poems, the order underlying earthly vicissitude is linked both to the "ringing true" of a pious earthly life and the final rest of heaven. A slight inconsistency in the spiritual analogy is also neatly cleared up. The arbiter of ringing's ordered change, the conductor, actually participates in the change itself, by ringing a bell. God, however, is of course changeless, what Ficino called a "motionless unity."⁹³ This hymn solves that problem by attributing the active role in change guidance to Christ, whose sacrifice is the force that brings men back into spiritual rounds. As God made flesh, Christ is the original accessible analogue for inexpressible divinity, but ringing takes that analogy even closer by associating Christ with the very human figure of the conductor, guiding man along the path of God's providential plan.

Within the context of this analogy, the particular aural qualities of change-ringing take on special significance. The subtle and complex interplay of the bells mirrors the ideal unity and symbiosis of the Christian community. The motifs of rising and falling notes bring to mind the cyclicity and gradual progress of man's ascent toward God, particularly emphasizing the interplay of sin and virtue and the "joys and sorrows" inherent in human existence. Most crucially, the fragments of music and the sense of a complex underlying "ordered course" cement the listener's faith in God's grand design. The bells' grand and far-reaching sound

⁹³ Ficino, *Platonic Theology*, p. 85.

naturally suggests analogy to the wider universe and ensures that their message reaches a large audience. For the purposes of inspiring Christian faith by miming Christian providence, the highly audible complexity and circularity of change-ringing have unparalleled advantages, particularly in an era in which belltowers were the tallest buildings and bells the loudest noise.

7. Parallels in Seventeenth-Century Poetry: Donne and Herbert

Bells were not the only means employed to convey this message, however. Having illustrated the ideology of change-ringing as fully as possible based on the small body of extant ringing poems, I would now like to employ analysis from a related field to further illuminate the question. Ringing has analogues in music and art, as I have suggested; since this was the “last age” of interdisciplinary thought,⁹⁴ there are also correspondences to be found in William Harvey’s 1628 theory of blood circulation propelled by the heart,⁹⁵ or in the tireless attempts of astronomers to “gird the sphere / With centric and eccentric scribbled o’er, / Circle and epicycle, orb in orb,”⁹⁶ finding order in the complex motions of the cosmos. Blood circulation and celestial orbit, if they could be proven to obey a guiding authority—the heart’s contractions, or Kepler’s laws—served the same function as change-ringing in enacting a parallel process to “the whole Circle of a Christian.”

But the clearest use of structure and imagery to mimic a spiritual experience occurs in seventeenth-century poetry, where the same ideas of circularity, change, and order that find expression in change-ringing are articulated through the ingenious manipulation of metaphor,

⁹⁴ Stephen Fallon, *Milton among the Philosophers: Poetry and Materialism in Seventeenth-Century England* (Ithaca: Cornell University Press, 1991), p. 19.

⁹⁵ See S. F. Mason, “Science and Religion in Seventeenth-Century England,” in *The Intellectual Revolution of the Seventeenth Century*, ed. Charles Webster (London: Routledge and Kegan Paul, 1974), pp. 200-209.

⁹⁶ John Milton, *Paradise Lost*, second ed., ed. Alastair Fowler (London: Longman, 1997), VIII.82-84.

rhyme, and syntax. An investigation of such poetry in connection to change-ringing is mutually beneficial: the more complex and articulate treatment of the poetry, as well as the copious criticism it has attracted, illuminates the phenomenon of ringing, while the more potently mimetic experience of ringing clarifies the underlying ideas so that they can be more easily discovered and investigated in the poetry.

The quintessential master of seventeenth-century poetic ingenuity is widely judged to be Donne, whose “metaphysical” style allowed abstract ideas to be expressed through compellingly concrete tropes. The most famous example of this is perhaps his “Valediction: Forbidding Mourning,” in which he and his beloved are compared to the feet of a compass, with one serving as a stable anchor to the ever-returning motion of the other. The use of this concrete image turns the abstract idea into an actively imagined experience; physical weight and motion take the place of theoretical love. Moreover, the compass, which “traces not merely a circle but a dynamic process,” is particularly relevant to the discussion of change-ringing. It is not a simple, static circle at all, but a spiral, which, like a method line, describes “a wandering path which is nevertheless rooted in circular regularity” and contingent on seventeenth-century notions of planetary motion.⁹⁷

For Donne, moreover, it is not enough merely to present a compelling metaphor and leave the reader to contemplate it. Instead, he walks us through all its possible implications (gratifyingly, Eliot remarks that Donne “would have rung every change” upon an idea that is only briefly touched upon by Homer),⁹⁸ until, from amid the tangle of metaphysical considerations, the original simple idea seems very far away indeed. But after enacting this

⁹⁷ Freccero, pp. 336, 342.

⁹⁸ T. S. Eliot, *The Varieties of Metaphysical Poetry*, ed. Ronald Schuchard (New York: Harcourt Brace & Co., 1993), p. 88.

winding progress, he often returns to a simple recapitulation of or variation upon the original idea at the conclusion of a poem. “A Nocturnall upon S. Lucies Day,” for example, begins with “Tis the yeares midnight, and it is the dayes,” and ends with “this / Both the yeares, and the dayes deep midnight is,” after leading the reader through an investigation of renewal and death and chaos in between.⁹⁹ What ends the poem is a subtle rearrangement of what begins it, with the result that the poem itself seems to describe a circle. As a commemoration of the annual cycle, “A Nocturnall” is also particularly relevant to the custom of ringing at midnight on New Year’s Eve: the circularity of the poem—or of the piece of ringing—mirrors the circularity of the year. In “A Valediction: Forbidding Mourning,” meanwhile, the trope of circular progress resonates particularly effectively with the poem’s central message that, though the speaker “far doth roam”—through metaphorical exposition as well as through the physical world—the “circle just” of his lover’s firmness causes him to “end where I begun.”¹⁰⁰ After enacting the compass’s circle with the wandering and complex elaboration of the conceit, Donne returns to the message of constancy and inevitable future unity.

Structure also lends meaning to Donne’s Anniversaries, the first of which I have previously quoted on the subject of macrocosmic doubt. It is indicative of the general atmosphere of philosophical vexation I have described, as well as of Donne’s own mental flexibility, that in these two poems (written in 1611 and 1612, and subtitled “Anatomie of the World” and “Progres of the Soule,” respectively) he uses the occasion of the death of Elizabeth Drury to elaborate on themes of worldly decay, spiritual progress, and eternal exaltation.¹⁰¹ Moreover, in keeping with the experiential aesthetic of his time, Donne uses the poems’ structure

⁹⁹ *Complete Poetry and Selected Prose*, pp. 34-35.

¹⁰⁰ *Ibid.*, pp. 38-39.

¹⁰¹ *Ibid.*, pp. 185-211.

to convey philosophical subtleties that are not initially evident in their substance. Though he focuses in the First Anniversary on enumerating evidence of decay in both microcosm and macrocosm, he does so within a highly structured system, in which an organized argument and the repetition of key lines and sentiments belie his own assertion that “beauties best, proportion, is dead” (l. 306). This almost subconscious “impression of completeness” is then descriptively fulfilled in the Second Anniversary, in which “a series of variations from the norm” established in the first poem “forms an order in itself...that is itself a microcosmic ‘progres of the soule.’”¹⁰² The First Anniversary’s refrain, “shee is dead,” becomes in the Second Anniversary the “valedictory ‘shee is gone,’” which then becomes “shee doth...survive” (l. 389), conveying, “through incremental gradations,” not only an “ascending scale” of spiritual progress but a “rhetorical circle” that moves from earth to heaven.¹⁰³ The two poems work off each other structurally and thematically to give a central impression of the order and movement of the Christian soul. The emphasis on progress, and the manipulation of poetic structure to provide for the reader an experience of that progress, are crucial parallels to the seventeenth-century conception of change-ringing.

An in-depth examination of the Anniversaries is beyond the scope of this essay, and in any case the question has already been ably addressed by Edward Taylor. A more manageable sample of Donne’s treatment of the philosophy that underlies change-ringing can be found in his devotional poetry, specifically in “La Corona,” a sequence of seven sonnets whose structure mimics its subject: the difficulty of accessing God through mortal praise. The last line of each sonnet becomes the first line of the next, looping around so that the first line of the first sonnet is

¹⁰² Edward Taylor, *Donne’s Idea of a Woman: Structure and Meaning in The Anniversaries* (New York: Columbia University Press, 1991), p. 100.

¹⁰³ Ibid.

the last line of the last. The identity of the first and last lines of the poem is an obvious analogue to rounds, but the repetition of intermediate lines also mirrors a concept in ringing that I have not yet touched upon: the lead or course end.

A lead end occurs whenever the treble, which has been hunting or treble-bobbing, returns to the front of the change to lead the other bells. A course end occurs every $N-1$ lead ends, where N is the number of bells. The calls made by the conductor determine the order of the bells at a course end, and peal compositions are traditionally transcribed by noting the course ends created by the calls. Thus the course end is a kind of marker within the general circular progress of the changes, designating both the end of one sequence of calls and the beginning of another. In many methods, the lowest bells maintain the same position at every course end; the change, for example, might be 14325678 at one course end and 13526478 at another. (In composition notation, to save space, the bells that stay in the same place at course ends are usually left out: these changes would therefore be written as 43256 and 35264 respectively.) The effect is therefore one of a partial return, mitigated by a center of continued change. The sound hints at the origin and the eventual goal—rounds—but also underscores the perpetual change still in progress.

This is approximately what is going on in “La Corona,” which Margaret Maurer calls “the self-conscious attempt of a human soul to describe an inhumanly perfect motion.”¹⁰⁴ In the terms outlined in Donne’s sermons, this is the attempt to move from the circle of earthly vicissitude to the circle of divine constancy, and, sure enough, the first sonnet invokes the “All-changing, unchang’d, Ancient of Days,” who “crown’st our ends, / For at our ends begins our

¹⁰⁴ Margaret Maurer, “The Circular Argument of Donne’s ‘La Corona,’” *Studies in English Literature, 1500-1900* 22, no. 1 (1982): 51-68, p. 57.

endless rest.”¹⁰⁵ The second and third sonnets are concerned with Christ’s earthly birth, by which he made himself “to His intent / Weake enough, now into our world to come” (3.3-4); the beginning and ending line, “Immensity, cloistered in thy dear womb” (2.14 and 3.1), captures the miraculous strangeness of such an accommodation. After describing Christ’s crucifixion, Donne pleads with him: “Now thou art lifted up, draw mee to thee” (5.12), harping again both on the desired transition between earth and heaven and on Christ’s crucial role in that transition. In the seventh sonnet, Christ enacts the resurrection of men: “Nor doth He by ascending shew alone, / But first Hee, and Hee first, enters the way” (7.7-8). As we have seen in the “Bellringers’ Hymn,” Christ is the original mime of the progress of the soul, leading the way for mankind behind him.

Here, however, that mimesis is echoed in the structure of the poem itself, as it is not in the “Bellringers’ Hymn” but in the action of change-ringing. The circular repetition expresses for the reader the same gradual ascent to resurrection that Christ performs in the poem’s action. Maurer notes that the repeated lines often shift moods, and the words within them often shift parts of speech,¹⁰⁶ so that, for example, the subjunctive “I again risen may / *Salute the last and everlasting day*” (6.13-4) becomes the imperative “*Salute the last and everlasting day*” (7.1), shifting from doubt to exalted certainty. More crucially, the “dry soul” that is the object of Christ’s moistening in sonnet 5 becomes the triumphant enactor of freedom in sonnet 6. The last line of the sequence, though the same as the first even syntactically, is colored by what has happened in between, in the same way that men become worthy of reunion with God through that “vicissitude of years” they have endured.

¹⁰⁵ *Complete Poetry and Selected Prose*, pp. 230-233, sonnet 1, ll. 4, 9-10. Hereafter references to “La Corona” are given parenthetically by sonnet and line number.

¹⁰⁶ *Ibid.*, p. 64.

This realization of gradual progress is crucial to the poem's meaning. The sonnets trace the life of Christ, who "with [His] Blood [hath] mark'd the path" to heaven (7.10), but they also trace the triumphant progress of the soul that follows Christ's guidance, "the soul whose inner life is a continual contemplation of God in spite of worldly vicissitudes."¹⁰⁷ Through its articulation of a path to heaven that is, despite moments of melancholy along the way, "as reliable and beneficent as solar movement,"¹⁰⁸ Donne expresses his faith in that progress, but also in the praise that brings him closer to Christ, his spiritual guide. For the readers, meanwhile, the progress performed by Christ occurs again in the reader's experience of the poem. The crux of this experience is the concept of the repeated lines, which, like ringing's course ends, evoke both constancy and continual change, and remind one of the highly structured plan underlying apparent circularity and vicissitude. In both instances, this effect is linked to a sense of God's divine plan, here structured around the eschatological example of Christ. Moreover, each suggests that this very act of mimesis is a form of religious praise; the first and last lines of the poem are "Deign at my hands this crown of prayer and praise," rendering praise metaphorically as well as experientially as a circular object.

An even more focused effort to express religious concepts through poetic structure can be found in the work of George Herbert, Donne's near contemporary, whose extant work is less concerned than Donne's with the specifics of secular existence, and more concerned with conveying the essence of an intense religious experience. Although Herbert the majority of his life in London and Cambridge, where he must have experienced the same climate of philosophical and scientific cataclysm that precipitated the rise of change-ringing, he spent his last—and apparently most productive—years as a "country parson" in Bemerton. In his one

¹⁰⁷ Freccero, p. 345.

¹⁰⁸ Maurer, p. 66.

published book of poems, *The Temple* (1633), he approaches religion not abstractly but through the lens of personal struggle, magnified by the ingenious use of form. The poems appear to express a long—and ultimately successful—wrestle with the immensity of Christ’s sacrifice, the inadequacy of human praise, and the remoteness of God from immediate experience. Moreover, through their use of unprecedentedly inventive and varied stanza structures, they allow the reader to join in the experience of that struggle.

Albert McHarg Hayes has made a study of the experimental stanza structures of *The Temple*, finding 111 different stanza patterns, some unique in all of English poetry.¹⁰⁹ Some of these structures seem positively postmodern. The lines in “Easter Wings” and “The Altar,” for example, are arranged in the shape of the object described, so that a poem about ascending to heaven on angel wings is also a pictorial representation of those wings. Similarly inventive is “Paradise,” in which all the line-end words in each stanza are the same, but with one letter pared away: thus “GROW” in line 1 becomes “ROW” in line 2 and “OW” in line 3. These poems create a powerful visual effect of underlying order. The alliance between shape and subject forms a “double praise” (“Mans Medley,” l. 36), strengthening the theological assertions made in the poems. But these are static representations; the wing shape in “Easter Wings,” while a powerful visual aid, does not imbue the actual process of reading with any feeling of ascent, as do the rising notes in change-ringing. Such an effect can be found in those of Herbert’s poems in which repetition and line breaks create an experience of the slow progress towards God that is described.

Herbert shows a marked preoccupation with this progress. In “The Flower,” he likens God’s renewal of the soul to the renewal of flowers in spring, celebrating the divine power to

¹⁰⁹ Albert McHarg Hayes, “Counterpoint in Herbert,” *Studies in Philology* 35, no. 1 (1938): 43-60, p. 43.

bring a soul “down to hell / And up to heaven in an hour” (ll. 16-17). Flowers are not particularly dynamic objects, but Herbert imparts movement to the analogy, calling men’s souls “flowers that glide,” searching for the “garden...where to bide” that God has prepared for them (ll. 44-46). The awkwardness of the metaphor speaks to the urgency of his need to express simultaneously cyclic renewal, wandering progress, and eventual rest; if Bemerton had had a decent ring of bells, he might have found a more convenient trope.

“The Flower” is a fine example of Herbert’s inventive stanza structure, with a mix of long and short lines that suggests the halting progress of “growing and groning” toward heaven (l. 25). But for a structure that more closely echoes the circularity and renewal expressed in “La Corona” and in change-ringing itself, we may turn to another poem from *The Temple*, “A Wreath.” Unlike the short and varied stanzas of many of Herbert’s poems, “A Wreath” consists of twelve unbroken lines of alternately rhymed iambic pentameter. Like “La Corona,” “A Wreath” begins and ends on the metaphor of praise as a circular object: a “wreathed garland of deserved praise” in the first line, and a “crown of praise” for which the inferior wreath is exchanged in the last. Here, too, the metaphorical crown is expressed in the structure of the poem itself; apart from the bookending repetition of the image, there is the rhyme structure itself, in which the rhymes of the first four lines mirror those of the last: praise/give/ways/live in lines 1-4 return as live/ways/give/praise in lines 9-12, so that the reader feels the same sense of circularity described in the poem.

Another striking aspect of “A Wreath” is the repetition within the lines themselves. Throughout the poem, the phrase that ends one line is rephrased in the next line. This is similar to the modulated repetition of key lines in “La Corona,” but Herbert makes more exhaustive use of its possibilities. The second version of the phrase is often a correction or elaboration of the

original version, creating an experience of slow, methodical progress marked by the miniature circles of regular setbacks. “My wayes” in line 3 becomes “My crooked winding wayes” in line 4; “wherein I live” in line 4 becomes “wherein I die, not live” in line 5. The effect here is similar to the jagged nature of a method line, and particularly to the frequent occurrence of “dodges” along that line, where two bells switch places with each other, sometimes several times, before each continuing along their original path. It is a mimesis of the very “crooked winding wayes” described, which, combined with the circularity of the rhyme scheme, creates a dual effect of gradual progress and circular return.

Such a consonance between form and purpose is not everywhere in seventeenth-century poetry. Nor is change always conceived of in such terms of ordered circular progress, or in such a spiritual context. For a counterexample we may look to Cowley, whose “Inconstancy” uses the world’s changeability to justify falling out of love, because to be “Constant, in Nature were Inconstancy; / For ’twere to break the Laws her self has made” (ll. 19-21). Inconstancy is natural to the mortal world, but there is no greater constancy outside it, and there is no structure guiding the inconstancy we see. Moreover, the structure of “Inconstancy” does nothing to enhance its meaning; it is written in uniform blank verse, which, if anything, belies the assertion that the world is “a Scene of Changes.” The phenomenon of structural providence that we see in Donne and Herbert is not uniform across the poetry of the seventeenth century. But that does not make it any less a seventeenth-century phenomenon, entirely in step with the contemporary phenomenon of change-ringing. For the final part of my investigation of the parallel between poetry and ringing, I shall turn to Milton’s *Paradise Lost*, the most ambitious and perhaps the most famous work of seventeenth-century poetry; I shall attempt to show that *Paradise Lost* is the closest thing to a poetic articulation of the ideas that informed change-ringing.

8. Providential Mimesis in *Paradise Lost*

This claim seems initially tenuous. Milton was not an Anglican preacher like Donne or Herbert; in fact, he was so unorthodox in his religious views that he could not even properly class himself as a Puritan. He hated the established church, and the monarchy, and the university system; if the seventeenth century was a time in which traditional structures crumbled, Milton reveled in their crumbling.

But change-ringing was the product of a particular philosophical and aesthetic age, not of any specific set of religious or political beliefs, and while Milton did not write *Paradise Lost* out of allegiance to any particular sect, he was certainly writing to uphold a doctrine. The subject of *Paradise Lost* is not only the Fall but its redemption, not only “the gloomy results of sin, but...the cure;”¹¹⁰ Milton’s intention was to place the emergence of original sin firmly within God’s greater plan for mankind and thereby to exonerate God from any blame for the apparent futility and vicissitude of earthly life. Perhaps more than any other poem’s, this purpose closely parallels that of ringing. Moreover, it is completed with the same grandeur of scale that we find in ringing, which entails the world’s largest and loudest instruments projecting their sound from what was traditionally the tallest building in the town, involving everyone within earshot—whether actively listening or not—in the aural representation of Christian doctrine. Milton—never a humble man—aimed literally to “justify the ways of God to men,” and to all men. This is a poem intended to be “doctrinal to a nation,” explicating the role of providence to the whole of Christian society.¹¹¹ Like ringing, *Paradise Lost* was intended for an audience, and a large one.

¹¹⁰ C. A. Moore, “The Conclusion of *Paradise Lost*,” *PMLA* 36, no. 1 (1921): 1-34, p. 10.

¹¹¹ Rosalie Colie, “Time and Eternity: Paradox and Structure in *Paradise Lost*,” *Journal of the Warburg and Courtauld Institutes* 23, no. 1/2 (1960): 127-138, p. 127.

Given the grandeur and the urgency of his mission, it is unsurprising that Milton should have gone about executing it in a way that earned him a reputation as “one of the most conscientious and painstaking artists in our literature.”¹¹² Like Donne and Herbert, he does not simply state his poem’s theological message, but embeds it into the reader’s experience through the careful manipulation of structure. It is in this regard that *Paradise Lost* most resembles change-ringing, for both are so carefully and pointedly structured that they are often thought lacking in aesthetic appeal. Joseph Addison called *Paradise Lost* “abstruse” and overly jingly,¹¹³ F. R. Leavis declared that Milton had renounced the English language in favor of a “wearying deadness” and a “dominating sense of righteousness.”¹¹⁴ In 2011, meanwhile, a band of change-ringers were trapped in a Yorkshire belltower by an “irate villager who took exception to their noise.”¹¹⁵ The appeal of the poem is as obscure as the appeal of the exercise, and a defender of either will make approximately the same argument, which, if he or she is particularly eloquent, will sound like the argument made by Christopher Ricks in defense of *Paradise Lost*: “To handle syntax with such various control is not what one would expect from a poet who was callous to the intrinsic nature of English,” but is rather “the result of a strength manifesting itself in innumerable tiny, significant, internal movements.”¹¹⁶ Or, as a ringer interviewed after the Yorkshire incident put it, “It really isn’t repetitive at all.”

Obviously, *Paradise Lost* has attracted more capable apologists than has change-ringing, but the two are so closely connected, both in purpose and in method, that the theories designed to

¹¹² C. A. Moore, p. 6.

¹¹³ Joseph Addison, Richard Steele et al. *The Spectator*, 3 vols. (London: J. M. Dent, 1907), vol. 3, pp. 63-64.

¹¹⁴ F. R. Leavis, *Revaluation: Tradition and Development in English Poetry* (London: Chatto & Windus, 1936), pp. 52-54.

¹¹⁵ “Bellringers locked in Sharow church tower over noise,” BBC News, June 2, 2011, <http://www.bbc.co.uk/news/uk-england-york-north-yorkshire-13632188>.

¹¹⁶ Christopher Ricks, *Milton’s Grand Style* (Oxford: Clarendon Press, 1963), pp. 102, 150.

explicate Milton can be applied with very little modification to ringing itself. By explaining these parallels, with the help of the Miltonists' analysis, I hope to further illuminate the complexities of ringing's ideology, as well as to shed some light on Milton's own design.

Paradise Lost, as I have indicated, hinges on the thesis "that 'Eternal Providence' can be asserted to Man, thereby justifying God's ways."¹¹⁷ It is a poem *about* the necessary and redeeming force of positive change, asserting God's authority in a time when human "agency and organization" had been called into question by civil war and the conventional order of things had been interrupted by scientific discovery.¹¹⁸ Milton's response is to assert the inherence of divine providence in all things, including original sin. The poet's muse is urged at the start of the poem to sing "of man's first disobedience," but even in these very first lines it is clear that that disobedience is a part of God's plan, a necessary precondition for the intervention of Christ described in the lines that follow; both are steps on the way to a "blissful seat" and "union without end." This plan is neatly summed up by God himself, when he explains his creation of a race of men to dwell on earth,

Not here, till by degrees of merit raised
They open to themselves at length the way
Up hither, under long obedience tried,
And earth be changed to heaven, and heaven to earth,
One kingdom, joy and union without end. (VII.157-161)

If this is not sufficient evidence of Milton's far-reaching scope, there is the vision of the future permitted to Adam in the final two books of the poem, which describes, in addition to grisly episodes of fratricide and deluge, the slow process of man's redemption, first by "imperfect" law

¹¹⁷ John T. Shawcross, "The Balanced Structure of *Paradise Lost*," *Studies in Philology* 62, no. 5 (1965): 696-718, p. 712.

¹¹⁸ John Rogers, *The Matter of Revolution: Science, Poetry, and Politics in the Age of Milton* (Ithaca: Cornell University Press, 1996), pp. 2-3.

and then by Messianic grace. This vision does not occur in Genesis, and it is no more a simple relation of Adam's experience than the invocation at the beginning of the poem was a mere plea for a muse's intervention; both are pageants of divine providence intended to reassure the reader. The poem's action ostensibly deals only with the first half of the providential cycle: the fall from grace following the creation of a perfect universe. This is as incomplete as a piece of ringing that ends before the bells have returned to rounds, and Milton necessarily extends it to include the other half of the circle, the movement toward redemption.

This is all the more crucial because, on a fundamental level, *Paradise Lost* acts as a praise poem. Like change-ringing, it performs the dual function of illustrating God's beneficence and modeling the act of Christian praise. The poem itself, by miming the action of divine providence, is a celebration of that providence and consequently an artifact of praise, but Milton makes that mimesis more explicit by rendering praise as a key part of the poem's action, the pious antithesis of sin. Praise is the primary work of the angels, and it is so all-important to Adam and Eve that, rather than contemplate the possibility that God might go unpraised while they are sleeping, Adam must posit "Millions of spiritual creatures" sending up "ceaseless praise" (IV.677-679). Scorn of praise, meanwhile, is Satan's primary mode of rebellion; he derides the angels' "easier business" of singing hymns and cringing at "practis'd distances" rather than fighting for justice (IV.943-945).

In order to better understand the kind of praise the poem itself is performing, it is worth examining the samples of praise Milton provides. Crucially for the comparison of the poem to ringing, the predominant characteristic is a mimesis of the thing to be praised, which in this case—as with ringing—is divine providence. Hymns and descriptions of worship are dominated

by repetitive imagery of circularity and change, which occasionally infuses even the structure of the passages themselves.

The clearest example of this phenomenon is the praise hymn sung by Adam and Eve at the beginning of Book V—a hymn that, according to Joseph Summers, “mirrors in little the large structure” of the poem by involving all of creation in an act of praise.¹¹⁹ This follows on the incident of Eve’s dream, the first appearance of “offence and trouble” (V.34) in God’s supposedly evil-proof Paradise; a reiteration of divine providence is therefore necessary to restore the poem’s balance, and Adam and Eve accordingly hasten to the field to pay their orisons “in various style” (V.146). Variety is the overwhelming idea of this hymn (V.153-207), which is structured as a series of invocations to aspects of creation to join them in “his praise.” The invariable qualities of these varieties of praise are movement and change. The angels are importuned to “Circle his throne rejoicing,” those on earth to “extol / Him first, him last, him midst, and without end” (V.163-165). The sun is asked to “sound his praise / In thy eternal course, both when thou climbst, / And when high noon hast gained, and when thou fallst” (V.172-174). The planets, “wandering fires that move / In mystic dance not without song,” are asked to “resound / His praise” (V.177-179), as are the elements that “run / Perpetual circle, multiform,” the “mists and exhalations...rising or falling,” the birds that ascend to heaven and the land creatures that “lowly creep” (V.181-182, 197-201).

The imagery and imperative mood of this hymn evoke the style we have seen in bell inscriptions; the command to the elements to “let your ceaseless change / Vary to our great maker still new praise” (V.183-184) seems particularly apt. But change is not only the means of praising God; it is also cause to do so, as evidence of the perfective progress of his universe. All

¹¹⁹ Joseph Summers, *The Muse’s Method* (London: Chatto & Windus, 1962), p. 71.

the symptoms of natural changeability cited in the hymn—the “variety without end” provided by God at creation (VII.542)—mimic what they praise: the varied, harmonious, circular nature of God’s creation. The elements that “nourish all things” and produce “still new praise” do so because they “mix” and run “perpetual circle;” the movement of mists both “wet[s] the thirsty earth” and gives “honour to the world’s great author.” Even the waving pine trees are inspired by the praiseful airs to move “in sign of worship.” The universality of God’s praise and the variety that constitutes and precipitates it also serve to link all the elements of creation together in their shared identity as part of God’s plan. Like the angels at III.344-372, the elements of the natural world are brought into celestial unity “by the idea of obedient worship.”¹²⁰ The “mystic dance” of the planets is teleologically connected not only to the circular rejoicing of angels but to the humbler, but no less variegated and devout, creeping of animals, because each is a moving instance of God’s plan and therefore an engine of praise. More light is shed on this principle later in the poem, when Raphael describes the universal praise that accompanied the Son’s ascension to heaven after creation: “the earth, the air / Resounded (thou rememberst, for thou heardst) / The heavens and all the constellations rung, / The planets in their stations listening stood” (VII.560-563). Even Adam and Raphael themselves are complicit in this act of praise, which encompasses the whole harmonious newly-created universe, emphasizing the role of God’s providence in all things.

Adam and Eve and the angels, being unfallen creatures in an unfallen universe, have a privileged awareness of that providence. Milton’s readers do not. It is consequently his work, throughout the poem, to convey a sense of the order and harmony inherent in a universe

¹²⁰ Don Cameron Allen, *The Harmonious Vision: Studies in Milton’s Poetry* (Baltimore: Johns Hopkins, 1970), p. 99. See also Stanley Fish, *How Milton Works* (Cambridge, Mass: Belknap Press of Harvard University Press, 2001), p. 40.

determined by positive change, in an effort parallel to the act of change-ringing itself. One of the most obvious ways in which this is accomplished is through the use of circular and cyclical imagery, reminiscent of the hymn, to portray what Kester Svendsen calls a “prelapsarian cosmos, dominated by the circle.”¹²¹ This dominion extends from “the farthest reaches of [Milton’s] universe to the smallest detail of the sublunar region,” and can be traced back to the very moment of creation as described by Raphael, in which the universe was measured out by golden compasses that “symbolize the precision and perfection of the cosmic architect.”¹²²

This relation between circularity and divine perfection is borne out throughout the poem. Satan reports that the earth was “Created vast and round, a place of bliss” (I.832); Paradise “crowns” Eden with an “enclosure green” (IV.133); most striking, however, particularly within the context of seventeenth-century cosmology, is Milton’s attention to the circular movement of celestial bodies. At the moment in which Raphael describes the creation of the sun and the moon, Milton emphasizes their essential circularity with the artful placement of line breaks: “the sun / A mighty sphere” and “the moon / Globose” (VII.354-357); when the heavens are then set to move by the Son’s hand, he uses two expressions of circularity, “rolled / Her motions” and “wheeled their course” (VII.499-501). The grandeur of these moving circles preoccupies Adam and Eve, who both wonder—Eve to Adam and Adam to Raphael—what justifies the “restless revolution” of the heavens about the comparatively small earth; and the grand scale of the cosmos is underscored by Satan’s dizzying journeys through the constellations.

This is, of course, the unfallen cosmos, before the repercussions of original sin skew the axis of orbit. Therefore, despite his awareness of modern cosmology, Milton could identify its movements with the same perfect circles that define the movements of the angels in moments of

¹²¹ Kester Svendsen, *Milton and Science* (Cambridge, Mass: Harvard University Press, 1956), p. 48.

¹²² *Ibid.*, p. 49.

praise. But the notion of *movement* is crucial. Milton's circles are not static. Like Donne's, they are animate. The stars are created to "rule the day / In their vicissitude, and rule the night" (VII.350-351), the sun to "run / His longitude through heaven's high road" (VII.372-373). In the moment of creation itself, Milton quotes "Let there be lights..." from Genesis, but crucially adds a reference to "circling years" (VII.342), emphasizing the long-term endurance and circularity of the time defined by the newly-created light. Even in heaven, a simulation of "light and darkness in perpetual round" creates "Grateful vicissitude, like day and night" (VI.6-8); even in God's changeless world, the appearance of change is still desired. In earthly and heavenly contexts throughout the poem, change is referred to as "kindest change" (V.336), "change delectable" (V.629), and, of course, "grateful vicissitude," cementing its positive value even before the Fall causes Adam and Eve to know real change.

It is necessary to contrast divinely-sanctioned change with the kind of change that Satan and his followers have undergone, described variously as "dire change" (I.625), "hideous change" (I.313), and "bitter change" (II.598). Like Chaos and Mammon's Pandemonium, this species of change can be most accurately compared to the "discord" abhorred in ringing poems, which occurs when the bells are not rung according to proper order, whether because the conductor is lacking, the method is unclear, or the ringers—the "human graces" of Bunyan's poem—are inadequate. Hellish change is diametrically opposed to the movement of the angels and planets in "mazes intricate, / Eccentric, intervolved, yet regular / Then most, when most irregular they seem" (IV.622-624). There is no underlying order to Satan's uncontrolled fall or to his current state in hell, and, most crucially, there is no possibility of positive change to come. Having experienced the "bitter change" of his fall from heaven, Satan is now effectively stagnant. He takes pride in his "mind not to be changed by place and time" (I.253) or by divine

punishment, but that refusal to change is really the substance of his damnation. This is clearest when, in Book III, he climbs so far as to be able to see Jacob's ladder, "Ascending by degrees magnificent / Up to the wall of heaven" (III.502-503), but its presence only "aggravate[s] / His sad exclusion from the doors of bliss" (III.524-525). The positive change permitted to mankind and symbolized by the ladder is forbidden to Satan, who, despite his extravagant journeys across the cosmos, inevitably ends up back in hell. Unlike man's, his fall is irreversible.

Like Satan's descent to hell, the Fall of Adam and Eve is characterized as change ("mortal change," X.273). But it is not catastrophic. Change in man's universe, unlike in Satan's, is sanctioned by its essential circularity; this is true of the movements of the stars and planets and of the alimentary and seasonal cycles described in Eden, and in the long term it is also true of Adam and Eve, who have affirmed their participation in the providential circle by their performance of circle-themed praise. Within this frame, the declaration that they "now / Must suffer change" (X.212-213) does not seem so calamitous. They have been watching such change enacted before them since the moment of their creation, and though their path is now one of seemingly-disheartening vicissitude, of "wandering steps and slow" (XII.648), they are now finally active in the cycle of providential change they have previously described in their own hymn. The Fall is truly providential because it has set in motion the wheels of eventual salvation; like the first change leaving rounds, it is a moment of seeming calamity and chaos that is in fact deeply structured, and without which the final return of order would not be possible. This is partly thanks to the Son's promise to redeem mankind—positioned, of course, in Book III, as far from the poem's beginning as God's judgment on man is from its end—but also thanks to the divine sanction of circular change that has been built up throughout the poem. Sin, as the catalyst

of change, leads to “a greater manifestation of the glory of God and immeasurably greater benefits for man than could conceivably have been otherwise obtained.”¹²³

Milton conveys this idea through his plotting and imagery, as I have shown, but, in line with the penchant for experiential mimesis typical of his historical moment, he also brings it to life with the subtler details of poetic structure. The work of *Paradise Lost*—and of change-ringing as described in the poems above—is not only to celebrate and imitate God’s creation, but to mime the movements of his long-term plan, strengthening the faith of the participants and the audience. Unique to change-ringing and *Paradise Lost*, and damaging to the reputations of both, is the intense commitment to this task in every element of the experience. It is not enough for Milton to insert the occasional repetitive or circular passage to mimetically reinforce his point; circularity and intelligent change must inform every aspect of his work, illuminating from several angles a deeper religious truth discovered by the act of readerly interpretation.¹²⁴

On the broad scale of the poem as a whole, these qualities are manifested in several ways. First, there is the reordering of events, typical of classical epic but used more extensively by Milton. The poem begins *in medias res*, with Satan’s council of devils, and the chronologically prior events—the war, Satan’s fall, and creation—are recounted much later. Even within Eden, the narrative of Adam and Eve is structured around frequent retellings of previous events, such as their separate memories of coming into existence (of which Eve’s is told first, although it occurred second) and Eve’s account of her dream. Recurring throughout this jumbled timeline is the repeated account of God’s prohibition of eating from the Tree of Knowledge. Like change-ringing’s deliberate introduction of disorder and subsequent return to order, the combination of

¹²³ Arthur O. Lovejoy, “Milton and the Paradox of the Fortunate Fall,” *ELH* 4, no. 3 (1937): 161-179, p. 163.

¹²⁴ See David Ainsworth, *Milton and the Spiritual Reader* (London: Routledge, 2008), pp. 2-3.

Milton's inversion of these events and the reader's subsequent reorganization of them back into chronological order creates a symmetrical process that mirrors the Fall and Redemption.

In order to reinforce this active mimesis of providential change, Milton makes effective use of his poem's book structure to express the specific concepts of circularity and control. The careful construction of parallels and antitheses between the books, creating a spatial "hieroglyph of the universal order of things,"¹²⁵ is reminiscent of the counterpoint of baroque music or the horizontal symmetry of a method line. The redistribution of the poem from ten into twelve books in the 1674 edition has allowed critics to attribute to Milton various numerological agendas—some of which are necessarily inconsistent with one another—but the very redistribution indicates that the large-scale structure of the poem was very much on Milton's mind. Shawcross finds in the original ten-book edition an emphasis of "the poem's completeness, its circularity, its perfection, and its unity," invoking the medieval belief that ten represented the perfection of the divine scheme; he also notes the suitability of Book VI (six being a circular and perfect number) as the book's center.¹²⁶ Shawcross suggests that the second edition was rearranged into twelve books in a "huckster"-like bid for increased revenue.¹²⁷ Crump, meanwhile, finds in the second edition a greater emphasis on "the dichotomy between destruction and creation," thanks to the centering of the poem around Raphael's account of the war in heaven and the creation of the universe; he also notes an increase in parallelism between books.¹²⁸

The axis of this structural parallelism is Christ's procession in a chariot at the center of the poem. Milton locates crucial narrative moments at equal distances both before and after this point. For example, Crump has measured out approximately equal numbers of lines separating

¹²⁵ Crump, p. 73.

¹²⁶ Shawcross, p. 708.

¹²⁷ *Ibid.*, p. 711.

¹²⁸ Crump, p. 74.

Christ's procession from God's creation of the universe (VII.131-179) and from Satan's creation of the cannon (VI.470-520), in a kind of large-scale chiasmus.¹²⁹ E. M. W. Tillyard has also compared Sin and Death's creation of a path to earth at X.229ff to a moment of divine creation at VII.210-242, arguing that, while the passages differ in tone, they are materially very similar, and citing particularly the comparison of the Holy Spirit brooding "like a dove over the abyss" to Sin and Death "hover[ing] over it like birds of prey."¹³⁰ Within the scope of a large-scale cipher of divine perfection, these "underlying numerological relationships" and material parallels between books imply "the presence of the Godhead and their provision by Him."¹³¹ Experiencing the careful skill of Milton in designing the poem allows the reader to imagine the even greater skill of God in designing the universe the poem describes. In an effect similar to that of seventeenth-century astronomers' charting of the cosmos, the neat arrangement of events within the poem suggests the omnipresence of divine order in a seemingly chaotic world.

This providential mimesis is even stronger at the prosodic level, where the reader not only perceives the complex order of the poem's structure but experiences it in each line. One way Milton achieves this effect is through his vocabulary. Christopher Ricks has drawn attention to the repeated use of certain loaded words, such as "error" and "fruit," in an innocent context, which serves to remind the reader of the looming catastrophe (in response to Addison and his followers, he calls this effect "more of a knell than a jingle"),¹³² but which also articulates a sense of predestined return, as the words contain from the beginning the meaning that they will have in the end, whether or not that meaning is active in the initial context. An analogous phenomenon in change-ringing would be the periodic occurrence of changes that resemble either

¹²⁹ Ibid., pp. 86, 103.

¹³⁰ E. M. W. Tillyard, *Studies in Milton* (London: Chatto & Windus, 1964), p. 34.

¹³¹ Shawcross, p. 713.

¹³² Ricks, pp. 103-113.

rounds or the reverse of rounds, reminding the listener of what is eventually to come. Something similar occurs, as Harinder Singh Marjara has pointed out, in Milton's use of similes and allusions, which often refer to occurrences outside the poem's frame of reference, whether in classical mythology, contemporary science, or simply later books of the Bible. The effect is to collapse time into a circle, such that the "paradoxes of time and eternity, of free will and foreknowledge," are illuminated by the experience of reading, reinforcing "our mythical sense of renewal by both reflection and anticipation."¹³³

Loaded word choice and anachronistic allusions, however, have not earned Milton his reputation as abstruse assassin of the English tongue. The most notorious quality of *Paradise Lost* is the tortuous complexity of its syntax. In the first sentence, famously, the main verb does not occur until the sixth line. With the exception of a few short sentences at crucial moments, the Miltonic sentence is hypotactic, consisting of chains of dependent clauses that involve the reader in a perpetual mental effort to divine their relation to one another and reconstruct their logical order. Thomas Corns has made a quantitative analysis of Milton's sentences, finding that they contain "roughly 28 percent more words, 35 percent more syllables and 28 percent more clauses" than the contemporary average, and that sentences with six or more dependent clauses are a frequent occurrence, resulting in a "long chain of subordination and elucidation" as "the reader's concentration, taxed to its limit, struggles towards that final clause, dependent as it is, at sixth remove, on the main clause with which the sentence opened."¹³⁴

Even taken one clause at a time, Milton's syntax is complex and, by many accounts, unnatural. He massages straightforward sentences into labyrinths of subject-verb, verb-adverb,

¹³³ Harinder Singh Marjara, *The Contemplation of Created Things: Science in Paradise Lost* (Toronto: University of Toronto Press, 1992), p. 138.

¹³⁴ Thomas N. Corns, *Milton's Language* (Oxford: Basil Blackwell, 1990), p. 29.

and noun-adjective inversion. In Latin, this tortured circularity of syntax would be commonplace; in English, it taxes not only the reader's concentration but the flexibility of the language to the limit. But while Milton's syntax may be Latinate, it is not inadvertently so, as Corns has proven by his syntactical comparison of *Paradise Lost* with Milton's other, comparatively straightforward, poetical works. Milton could write simply when he wanted to, and he did in many of his rhetorically persuasive political tracts. The Latinate syntax and vocabulary in *Paradise Lost* must therefore have a purpose, and, unsurprisingly, one related to circularity and change. Crump argues specifically that they serve to produce a circularity that, along with the poem's temporal shifts and long periodic sentences, suggests time's "plasticity in the hands of the poet, as in those of God, and point to its cyclical nature."

The culmination of these effects can be seen in a passage describing the angels' instillation of change into the postlapsarian world:

To the blank moon
Her office they prescribed, to the other five
Their planetary motions and aspects
In sextile, square, and trine, and opposite,
Of noxious efficacy, and when to join
In synod unbenign, and taught the fixed
Their influence malignant when to shower,
Which of them rising with the sun, or falling,
Should prove tempestuous: to the winds they set
Their corners, when with bluster to confound
Sea, air, and shore, the thunder when to roll
With terror through the dark aërial hall. (X.656-667)

The explicit function of this sentence is to convey the nature of the celestial and atmospheric movement that has resulted from man's transgression. Milton must characterize this movement as hostile, or it would not seem a suitable consequence of sin; therefore the planets' efficacy is "noxious" and their agreement "unbenign," the stars' influence is "malignant" and "tempestuous," and the atmospheric storms produce "terror." But all these elaborations of cosmic

disarray are contingent upon three verbs, each of which is followed by three lines of dependent clauses: “prescribed,” “taught,” and “set.” This regular, repetitive incidence of verbs gives a sense of underlying structure to a seemingly chaotic narrative moment, but the clause structure itself has a more complex effect. Each verb describes an action performed by the angels that produces this seemingly terrifying but essentially ordered change. Every instance of upheaval is the result of specific orders from the servants of God. The source of the change is the angels; the implicit source of the angels is God. The sentence requires the reader to hold these verbs, and their chain of divine causation, in mind throughout, appending them to each description of negative effect—the same work, in little, that must be done with respect to the poem’s narrative as a whole, inferring divine providence as the engine behind seemingly negative change. As a result, the angels’ strategic, divinely-sanctioned control of the cosmic crisis, implicit but ever-present, remains at the forefront of the sentence’s meaning, and the elements of the crisis itself are conceived of by the reader as “instruments of the final actor, God.”¹³⁵ As Seymour Chatman has indicated, this is the sense underlying many of Milton’s syntactical ambiguities, which describe a world in which superficial causative relations are unimportant, because God is the final, indisputable source of all motion and all meaning.

In this case, however, there is no ambiguity, only a skilful use of hypotaxis to simulate in the reader’s mind the conditions of divine providence. By hinging the lengthy contortions of his sentences on an initial clause, Milton achieves the same effect as change-ringing, imparting to his readers a sense of the underlying order and divine causality of what seem at first glance to be unrelated phenomena. Milton’s characteristic preoccupation with the macrocosm is especially effective in this regard, extending the reader’s understanding of divine influence to include the

¹³⁵ Seymour Chatman, “Milton’s Participial Style,” *PMLA* 83, no. 5 (1968): 1386-1399, p. 1387.

farthest and most complex “motions and aspects” of the known universe. Meanwhile, the syntactic inversions in almost every line mime in little the great circle of divine providence. Effectively, this kind of syntactic maze (a word that permeates *Paradise Lost*, from the “mazy error” of the rivers in Paradise (IV.239) to the “wand’ring mazes” of hell’s philosophers)¹³⁶ simulates the kind of exegesis the Christian must perform on the natural world in order to see in it evidence of God’s plan, rather than to be merely frightened by cosmic phenomena. Here and throughout the poem, careful order underlies seemingly intimidating complexity. The result is “both an awareness of man’s temporal confinement and also a feeling of assurance that comes with the cyclical sense of ‘return.’”¹³⁷

This analysis aptly mirrors the sense in change-ringing of a convoluted and chaotic-seeming structure that is nevertheless the result of careful and systematic planning, aimed at the creation of a sensation of order and harmony. Within the context of ordinary, straightforward English sentences, it also mirrors change-ringing’s distortion of order in order to produce an eventually ordered effect. And while its frequent excoriation as Latinate posturing also regrettably mirrors that of ringing as a tedious cacophony, the careful reader is aware of something more complex: these are the innumerable movements signifying internal strength, the “mazes intricate, / Eccentric, intervolved, yet regular / Then most, when most irregular they seem,” (V.622-624) in whose motions “harmony divine” (V.625) delights not only God’s ear but that of man, who is reassured and exalted by an enriched understanding of the divine complexity that underlies seeming disorder.

¹³⁶ See Kathleen M. Swaim, “The Art of the Maze in Book IX of *Paradise Lost*,” *Studies in English Literature 1500-1900* 12, no. 1 (1972): 129-140.

¹³⁷ Crump, p. 41.

9. Conclusion

This is the crux of the peculiarly seventeenth-century penchant for experiential mimesis. The effect in *Paradise Lost*—of “prolonged time that turns in on itself, perfecting through change,” of poet and Godhead “hastening forward toward a finite goal within the infinite circle of the creative imagination”—is one that unites reader and artist in contemplation of divine providence.¹³⁸ It is the effect sought by Donne and Herbert and loudly accomplished by change-ringing. It was born out of a climate of universal doubt, when the abstract contemplation of religious beliefs was not enough to reinforce them, and when a strengthened faith in technology led to redoubled efforts to express them through human ingenuity. The result was that the concepts of divine order and sanctioned circular change were enacted over and over again, mimed in little, broadcast from church towers, written into rhyme and syntax, created anew with each reading of *Paradise Lost* and each touch of Grandsire. Change-ringing began as a subliminal affirmation of religious optimism, infinitely farther-reaching than the similarly-intended devotional poems of Herbert or Donne. The bell had been traditionally a harbinger of death (even in 1679, Anthony Wood wrote of “People sick in every college: and one bell or other continually going”)¹³⁹ as much as an instrument of rejoicing; now it was harnessed to express the fusion of both death and rejoicing within the circular scope of divine providence.

It is undeniably true that after the first century of its conception, change-ringing drifted away from its religious roots. Ringing became a question of human achievement, rewarded with prizes and enlivened with beer; ringers themselves acquired the reputation of “drunken, ill-

¹³⁸ Crump, pp.152-154.

¹³⁹ Anthony Wood, *The Life and Times of Anthony Wood, antiquary, of Oxford, 1632-1695, described by Himself*, vol. 2, ed. Andrew Clark (London: Oxford Historical Society, 1891), p. 470.

mannered, bad behaved men,”¹⁴⁰ to such an extreme that in the nineteenth century a “belfry reform” movement was implemented to clean up the exercise’s reputation and renew amicable ties with the church. Now, many of the most active change-ringers hold no religious affiliation at all; the days in which a ringer could be cast out of the band for “run[ning] into the Belfrey before he do kneel down to pray as every Christian ought to do”¹⁴¹ are emphatically over. But the aural effect remains, whether or not its explicit doctrinal implications remain relevant. Souls are still “brought to the knowledge of the Infinite through the melody of the church bells.”¹⁴² Change-ringing continues to convey to its wide audience—at least those members of it that are not embittered by the sound of poorly executed plain hunt—the conviction that everything is and will be all right, that the apparent chaos around them means something and is going somewhere, and that someone is in charge who knows what he or she is doing. No one who has seen the glee on ringers’ faces at a roll-up will doubt this effect. It is easy to see why Donne and Herbert and Milton sought so urgently to capture it in verse, and while it is regrettable that change-ringers’ attempt to capture it has slid under the critical radar, the complex and jubilant sound of ringing on a Sunday morning is ample testimony to their success.

¹⁴⁰ George Venables, quoted in Morris, p. 63.

¹⁴¹ Rules of St. Stephen’s Ringers, cited in Cook, “The Organisation,” p. 75.

¹⁴² Morris, p. 404.

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