

**HOPE AGAINST HOPE:
PERSPECTIVES ON APOCALYPTICISM**

by

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Hope Against Hope: Perspectives on Apocalypticism

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Abstract

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This paper is an examination of the phenomenon of predictive apocalyptic writing, including some of the different kinds, their roots, possible motives and impacts. It provides a survey of apocalyptic prediction in the Western world, and specifically examines apocalypticism during 2001 and 2002 as set out in one supermarket tabloid, and in lay scientific magazines.

I propose that apocalypse is popular and hopeful, and appeals to the educated and uneducated alike. In some instances, the hope is an individual hope for a better life beyond, and in others, it is the hope of a better life for the human race here. As I pull together the diverse threads of my look at writing on the apocalypse, it seems that how hope is generated may indeed be the crux of the apocalyptic question — not, is apocalypse coming? but, can we do anything meaningful about stopping it? And is that our desire?

The paper was accompanied/paralleled by a performance in February 2003. Script excerpts, and comments on the performance process, form an appendix.

Quotation

The World then to an end shall come
In Nineteen Hundred and Ninety-One

— Mother Shipton (1488 –1561)

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INTRODUCTION

Predictions about the end of the world are a widespread and long-standing tradition, from the oracular pronouncements of the likes of Mother Shipton in the 16th century to William Whiston and his comets in the 17th, to the suicide pacts of religious cults, to Y2K, to the terrifying prophecies of environmental scientists today. We seem to have always lived in a world where many believe that a Final Judgement is inevitable, and possibly imminent.

I uncovered my own interest in predictions of the end of the world in two ways. First, in 1999, I started a collaborative creative project (a performance piece) that examined death, dying and aging. In our process, my group talked around various aspects of these issues, including the death of the planet. I found that by looking at predictions of planetary destruction just as predictions, rather than dissecting their specific content, I was strangely empowered around concerns that had been paralyzing me. I realized that these predictions were ubiquitous, time-honoured, and maybe an inescapable part of the human social fabric. I wondered whether current threats to planetary survival could profitably be looked at as simply another example of apocalypticism.

Second, my eye was drawn to the tabloids at the grocery store. Next to the ongoing labyrinthine accounts of murder trials and sex scandals were the Virgin Mary and the Endtimes. Predicting the end seemed to be at least as

marketable as the murder of Jon Benet Ramsay or the death of John John Kennedy (and perhaps less likely to result in lawsuits.) I began to buy apocalyptic tabloids.

A surprising (to me) response to this interest of mine was the intimation that my curiosity was ghoulish, or depressing, or akin to the crowd gathering to stare before the ambulance comes. Repeatedly, I encountered the insinuation that I had become someone without hope. It wasn't at all what it felt like. When the time came to formulate ideas for my final project for Graduate Liberal Studies (GLS), I knew it would be about endtimes. As the research unfolded, and I peered endlessly into the apocalypse, I realized that my work could address this question of hope and hopelessness.

This paper is an examination of the phenomenon of predictive apocalyptic writing, including some of the different kinds, their roots, possible motives and impacts. I propose that for the average person, both religious and secular apocalyptic prediction is not a ghoulish enterprise at all, but a hopeful endeavour. This has been said before about religious apocalypse, but I think it is also applicable to secular doomsday, most precisely a scientific doomsday that includes an impetus to action. I also think that in many instances where politics and apocalypse are entwined, the apocalyptic assumption precedes the evidence to support it, even in prophecy apparently based in objective observation.

To get to these conclusions, this paper looks at apocalypticism as it manifested itself in 2001 and 2002, in two different styles and contexts. As I am primarily interested in non-expert readers who are operating from commonly

held assumptions, I examine several issues of the supermarket tabloid the *Sun*, and concurrent issues of lay scientific journals. This leads to a closer examination of the anti-apocalyptic book *The Skeptical Environmentalist*, and its treatment in *Scientific American*. There are fundamental differences between the (religious) apocalypse of the tabloids and that of science magazines, most notably the question of whether or not the reader can do anything about apocalypse, and whether they might want to.

My aim is to show that apocalypse is popular and hopeful, and appeals to educated and uneducated alike. In some instances, the hope is an individual hope for a better life beyond, and in others, it is the hope of a better life for the human race here. As I pull together the diverse threads of my look at the apocalypse, it seems that this may indeed be the crux of the question — not, is apocalypse coming? but, can we do anything meaningful about stopping it? And is that our desire?

Biblical references in this paper are to:
Holy Bible: The New King James Version.
Nashville: Thomas Nelson, Inc., 1982.

CHAPTER 1

CONTEXT:
APOCALYPSE

Obviously, one prophetic movement will likely have the good fortune of coming at the very end of history and thus, if so inclined, will be right. Prophetic movements need to look at history and realize that they are not the first to believe that they are the "End-time Prophets."

Peter Davids, Storm Harvest
(Davids "What went wrong with Montanism?")

Our fondest hopes and expectations were blasted, and such a spirit of weeping came over me as I had never experienced before...We wept and wept until the day dawned...Has the Bible proved a failure? Is there no God, no heaven, no golden city, no paradise?

Hiram Edison
describing the reaction of Millerites to the Great Disappointment
(Baumgartner 169)

Apocalypticism is everywhere. Without seeking any evidence of the apocalypse, and without looking specifically at predictions of an end to life or an end to the planet as a whole, one is nonetheless repeatedly exposed to these predictions. Predictions of the end of the world often form part of works with completely different overall objectives.

For example, the verse from Mother Shipton used as the epigraph for this paper was found in a coffee table book about earth-based religions.(Michell 86) William Whiston's comets are a topic of discussion in the 18th century novel *Tristram Shandy*.(Sterne) (Whiston, who was writing in the 17th century, said comets were going to hit the earth and destroy life as we know it.(Ash 37, Sterne 75) The apocalyptic language in New Age and political theory is often striking. For example, in 1847 Karl Marx, writing about making a new society, said it was "Combat or death: bloody struggle or extinction."(Marx 219)) I take this to mean that in Marx's view the struggle of the oppressed classes is the final battle for human survival. 16th century scholar and mystic Nostradamus wrote enough (16 volumes of predictive quatrains), and sufficiently vaguely (often in poetic code), to be alluded to in almost any discussion, not just about the end of the world, but also about a range of topics from love, to the rise of Hitler, to health.

This profusion of apocalypticism is all quite aside from writing that is part of many recognized religious end-time practices, such as the Book of Revelation in the Bible.

Many of us assert rational skepticism about much of what we read about the end being near, especially when the arguments given are essentially non-rational or non-scientific. However, we are also constantly exposed to predictions that are 'rational' and scientific.' Even if we are not in the habit of reading old fiction, or speculation about old thinkers, we encounter the planetary death sentence in the daily news. We are told that as humans we are going to destroy the planet soon, either through environmental degradation or nuclear

warfare or by irresponsible population growth. Science has long made a practice of providing justifications for doomsday that will satisfy skeptics.

Christianity and the Book of Revelation

It has been noted that “opinion polls repeatedly suggest that one fourth of the US population believe that the Second Coming [Christ’s return] will occur within their own generation.” (Keller 8) Judgement Day. For those of us living in a world saturated in Christian culture and references, the root of all doomsday predictions is the prediction of Christ’s Second Coming in the Book of Revelation (Rev.) at the end of the New Testament. There are other places in Bible where the Final Judgement and its portents are discussed very colourfully (Jeremiah, Acts, Ezekiel, Thessalonians, the Sermon on the Mount), but the Book of Revelation is devoted to Judgement Day.

The Book is itself the work of a doomsday prophet, John of Patmos, and is the account of a vision he had of the future, of the Final Judgement. At the beginning of his visionary experience, he tells us, Christ and the angels repeatedly instructed him to write of what he saw: “What you see, write in a book, and send it to the seven churches,” (Rev. 1:11); “Write the things which you have seen, and the things which are, and the things which will take place after this.” (Rev. 1:19); and later, quite prescriptively, “Write: ‘Blessed are the dead who die in the Lord from now on.’” (Rev. 14:13); “Write: ‘Blessed are those who are called to the marriage supper of the Lamb!’” (Rev. 19:9); “Write,

for these words are true and faithful.” (Rev. 21:5). And John is instructed to disseminate the information too: “Do not seal the words of the prophecy of this book, for the time is at hand” (Rev. 22:10). The result of all this writing is the Book of Revelation.

There is much debate among scholars about who John of Patmos might have been. In *The Complete Bible Handbook*, John Bowker tries to discourage speculation by saying, “all we know is what we learn from his book: that he was a Prophet (Rev. 22: 9), a Jewish christian deeply versed in the Scriptures, who had powerful opponents (2:6, 15, 20) and lived on the island of Patmos.” (Bowker 469) There are several Johns in the Bible who might have written Revelation, and one of the possible Johns (John of the gospels) was exiled to Patmos, so his residence is plausible. Tourists can visit a cave on Patmos where Revelation is supposed to have been written, though the site is now dedicated to Saint Anne. (Brockway “Patmos”) All this is a bit uncertain, so it follows that the date the Book of Revelation was written is also in doubt, though Werner Kummel in *Introduction to the New Testament* makes a convincing case for the date being during the reign of the Roman emperor Domitian. (Kummel 466-8)

However, regardless of who wrote it, or where, or when, there is no doubt about the influence of the Book of Revelation on those who read it. First, the return of Christ is absolutely essential to Christian faith. No matter how metaphorically or historically they interpret the Bible, Christians have to believe that Christ lived, that in the end he will come back, and that the Kingdom of Heaven will be theirs. “Insofar as the kingdom of God in Heaven has already

come in the life and death of Jesus, the future completion of the kingdom of God on earth is all the more certain," says Bowker. (444) This argument may seem tautological, but it comes with faith in Christ, and within the Christian faith the second coming will take place. Christ himself said it repeatedly. Paul emphasizes it in his letters to the Thessalonians (2 Thess. 1:7-8). Peter Kreeft says, "It is mentioned no less than 318 times in the New Testament." (Kreeft) Christ is coming. The detailed picture is in the Book of Revelation.

In the Book of Revelation apocalypse is inevitable, and Christians have no choice but to be convinced that it will happen. For believers, is a desired event. It is going to affect all of God's creation, that is, the entire universe and everything in it.

The Book of Revelation establishes patterns for many of the doomsday predictions of the next two millennia, even non-Christian ones. For instance, notable in this pattern are otherworldly beings who give instructions to the visionary, and also a writing style that is best described as florid, with vividly described monsters (e.g. locusts (Rev. 9:7-10), and beasts (4:6-8)), and dramatic events (e.g. earthquake (11:13 and 16: 18-20), seas turned to blood (16:3), the holy city descending from heaven (21:2)).

The end of the Book of Revelation is a repeated reminder that the events it describes are close at hand: "the time is at hand," (Rev. 22:10), Christ says, "I am coming quickly," (22:12), "Surely, I am coming quickly," (22:20). The Book of Revelation also describes the events that are signs that the end is on its way, though it is difficult to discern whether events contemporary with the reader are

those signs or not. It follows that the most popular examination of the Book of Revelation is to interpret 'quickly' to mean 'now,' and link the events that are described there to current events, to make a specific time-line. To select one example among many, the passage where the Book of Revelation talks of ten kings who are of one mind and "will make war with the Lamb." (Rev. 17:12 - 14) has recently been interpreted as being about the European Union.

(Unfortunately for its adherents, now that the E.U. has taken in more members, this analysis must be rethought. Such are the perils of precision in apocalypticism.) Umberto Eco points out in *Conversations About the End of Time*, "I can prove to you that every age has interpreted certain events in the light of this apocalyptic text [the Book of Revelation]: events such as comets, cows with two heads, and so on..." (Carrière et al. *Conversations* 181) What constitutes a plague — could it be AIDS? What is the Mark of the Beast — security devices?

Another way to deal with when the future chronology of the Book of Revelation will move into the present is to examine the time table that is laid out in the Bible and apply a system to it. Many have tried, for instance saying that a thousand years is a day for God, or re-examining what we know of the Bible as history. As historian Frederic Baumgartner points out, "Those who have done this sort of recalculation usually come up with a date that is within their own probable life-span, for what good will the Parousia be for those who crave vindication if it occurs after they are already dead?" (Baumgartner 71)

Why is it so appealing to bring the events of the Book of Revelation into the present? What is the appeal of choosing impending doom as one's interpretation of events? These are the questions at the heart of any examination of apocalyptic predictions. Simply put, the Book of Revelation already said it is going to happen soon, so why be concerned about exactly when? Why are there so many doomsday prophets?

Doomsday prophecy is not a monolithic field, because different aspects of doom appeal to different groups of people. For Christians, excitement about Endtimes is certainly excitement about meeting God and fulfilling the message of the Bible. In 1844, Millerite Hiram Edison called waiting for the Rapture " 'the richest and brightest of all my Christian experience.' " (Baumgartner 169) As Baumgartner notes, if doom is also Judgement Day, bad things are going to happen to bad people, and the possibility of revenge is always sweet. Most people, Christian or not, would agree that life is hard, and it can be a relief to think that it is going to end, rather than to feel pressure to change it. Mortality is the big human question, and it can be disappointing to think about life going on for others after one's own death. Easier if life ends for everyone at the same time. In *Conversations*, Jean Delumeau points out that the Book of Revelation is actually a book of hope. (70)

The root of apocalypticism might be the fact that after birth, death is the one universal human experience. Regardless of what we think might happen after it, death is a certainty, and can fairly be interpreted as an ending. If all our lives are certain to end, we might understandably propose that our world will

end sometime too. This is a profound assumption about existence that can be difficult to shake. Ultimately, contemplation of the possibility can lead in many directions, from Christian ecstasy to revolutionary fervor, and doomsday can serve as both inspiration and deterrent.

I tend to agree with Umberto Eco, who proposes in *Conversations* that much of the doomsday impulse is Christian, whether the influence be religious or cultural (see below in this chapter, discussion of *Conversations*). Like any *weltanschauung*, the Christian world view is all-encompassing and casts a shadow even outside its stated purview. In the 1925 Lowell lectures, Alfred North Whitehead talked about “the impress made on the European mind arising from the unquestioned faith of centuries.” (Whitehead 18) This impress does not necessarily lead to faith in Christ, but, given the fundamental significance of Endtimes to Christianity, could well be a key factor in apocalypticism. It could be profitable to keep this assumption in mind in the following survey of apocalyptic writing.

Perspectives on the apocalypse

Predicting the end of the world gives rise to images that are by definition dramatic and eccentric, and make for fascinating reading. It is no surprise, then, that there is widespread interest in writing about these predictions as well as making them. (Witness the present paper...) Some writers take on apparently disinterested compendia, grouping predictions by time or place, and drawing

conclusions about them. Others use predictions as the springboard for philosophical discussion. In the following, I sample some apocalyptic literature from different parts of this continuum.

Apocalypse Now and Then

In *Apocalypse Now and Then: A Feminist Guide to the End of the World*, Catherine Keller proposes to create a feminist 'counter-apocalyptic.' This term refers to Keller's situating of her analysis between two extremes: on one hand the denial of the apocalypse (anti-apocalyptic); and on the other the traditional "righteous inevitability" of Christianity. She sees her newly suggested third position as uniquely liberating: "If, then, counter-apocalypse echoes and parodies apocalypse in order to disarm its polarities, it also savours its intensity, its drive for justice, its courage in the face of impossible odds and losses." (Keller 20) Keller works from the standpoint that apocalypse "provides a kind of kaleidoscope for cultural self-consideration." (xiii) She sees the hopefulness in apocalypticism, and the utopian apocalypses that she sees sown worldwide by Christian colonization. "Apocalypse," she posits, "transforms the object of fear into the site of hope." (6) She observes that apocalypse is called on at times of disaster and tragedy, because "What other historic text can deliver an imaginary adequate to absolute doom?" (5) The anti-apocalyptic closes these doors. with a "closure of the text." (19).

Keller's book is an absorbing and detailed explication of her counter-apocalyptic contention, in which she also delineates many other apocalyptic

positions. Because of this, from one viewpoint Keller's book fits with works like Ted Daniels' *Prophets, Predictors and Hucksters of Salvation*. Their books interpret endtimes predictions politically and socially, and examine societal and planetary as well as universal apocalypse. For Keller, this has to do with community. "The concept of community can arguably be situated within the larger set of apocalyptic movements, as their product," and further, "[w]hat bonds the individuals "called out" ...of the larger society to the common goal of the New Jerusalem proves to be revolt." (181) She sees community as an intentional ideal only in the context of rebellion and epiphany. Thus intentionally created communities are united by futurism and rebellion, and at its most convincing, their rhetoric embraces an apocalyptic future. Thus she cites apocalypticism in Martin Buber on utopian socialism, Ernst Bloch's praise of the medieval apocalypticist Joachim de Fiore, and also of Friedrich Engels (Keller 183).

As radical communities with apocalyptic links, Keller specifically lists 15th century Hussites, movements in 16th century Germany, 17th century movements in England (Gerard Winstanly, Quakers, Fifth Monarchy Men, Ranters, Levellers, Diggers), and includes the apocalyptic Redstick Muskogee rebellion in early 19th century United States (184ff). Significantly for my proposed assumption above, she says, "Not surprisingly, this apocalyptic pattern does not seem to occur apart from Christian influence." (198)

Keller also raises many interesting points about the socio-cultural role of different kinds of apocalypse. She uses philosophy and post-modern linguistics to examine apocalypticism in its many forms. For example, she coins the term

'retroapocalypse' as a designation for "attempts to return to the letter [emphasis sic] of John's letter, "(7) and 'cryptoapocalypse,' for the apocalypse of those who do not believe, but are attracted nonetheless. She sees these two apocalypses as part of an interdependent dynamic "civilizational habit, " (8) similar (in my opinion) to Whitehead's impress.

Keller's book convincingly expands the possible definitions of what constitutes an apocalyptic vision beyond the strictly theological to the political, and for me this is the most arresting aspect of her work. As noted, she looks at various historical movements, as well as feminism, and the African American civil rights movement, for their radical apocalyptic aspects. She quotes Lee Quinby, a feminist postmodern philosopher, who argues against cleansing feminism of its apocalypticism (which Quinby identifies with the urge to identify, to homogenize, and to dualize) because " '[s]uch a cleansing is not possible — nor is it entirely desirable. To some extent, feminism must meet apocalypse on its own ground in order to be heard. And let's face it — feminist apocalypse is rhetorically powerful and has moved women to social action.' " (10)

Conversations About the End of Time

Apocalypse Now and Then came out in 1996, as the coming of the year 2000 in the Gregorian calendar began to occasion many doomsday predictions, though Keller successfully steers clear of discussing the millennium calendar change. The book *Conversations about the End of Time* came about three years later (1999) with a quite different agenda, that is, as a commentary on the advent of the year 2000.

I have to set a context here, since *Conversations* was published in the midst of a noticeable rise in apocalypticism. As 2000 approached, survivalists stockpiled supplies for Armageddon; the Holy Land saw a sharp increase in the number of visitors claiming to be Jesus Christ or the Virgin Mary; sales of batteries and lamp oil soared; and anticipating whichever apocalypse they envisioned, religious groups moved en masse to Jerusalem to prepare for the Second Coming.

There is one particularly notable group of predictions of that time: Y2K predictions, grounded in statements from computer programmers that all the computers in the world contain badly designed calendars. Computers would stop working on the transition from 1999 to 2000, said those making Y2K predictions. Wholesale and retail would be paralyzed, communications would be halted, hospitals would be unable to function, and airplanes would drop from the sky. There would be no heat, no water, no electricity, and no public transportation. Though life would not end, there would certainly be an end to every aspect of life as we in the industrialized world know it.

Y2K predictions appealed to those unwilling to put any store in religious fear — Y2K involved ‘real,’ scientifically justified, fears. Reiteration of the arbitrariness and inaccuracy of our calendar proved immaterial, because this crisis involved numbers in the computers themselves, not the legitimacy or not of the calendar. Similarly, it did not matter which date was the mathematically correct new millennium, January 1, 2000 or January 1, 2001. Again, the crisis did not involve legitimacy or correctness. Instead, computer programmers had a

heyday as oracles of disaster, gaining special status as people who understood it and could prevent it. Like their spiritual and religious counterparts, they were not taken to task when their predictions did not come true, but rather hailed as having averted certain disaster.

Catherine Keller chooses to distance herself from the mounting millennial fervor, what she calls “a growing pile of books warn[ing]..of ecological, economic or (once again) thermonuclear Armageddon” (Keller xi). *Conversations* uses them as a starting point. In it, four diverse thinkers — Jean-Claude Carrière, Jean Delumeau, Umberto Eco, Stephen Jay Gould -- are brought together to discuss the year 2000 and some of the thinking around it. Like Keller’s and Daniels’ work, their ‘conversation,’ (conducted in a series of separate conversations with the editors, Catherine David, Frédéric Lenoir and Jean-Philippe de Tonnac), is wide ranging. They range in a different direction, though, bringing in personal spiritual and artistic experiences, and cultural history. They examine troubling and inspiring developments in the environment and the social fabric, they look at Y2K (“What frightens us in our secular age is the computer breakdown.” (Gould in *Conversations* 2)) and touch on such themes as Catholicism, faith, memory, conspiracy theories, grammar, and panic (or not) in the year 1000.

Conversations ends with Umberto Eco’s discussion of the ‘holy terror of chance,’ and what he sees as a human willingness to believe in conspiracy (which includes mythology and religion) rather than chance. From here he lists some major events that could come to pass in the 21st century, “that have nothing to

do with conspiracy:" the end of the Europe of nation states; the end of white Europe; the end of the experiment of fraternity; the end of representative democracy; and the end of ethics. Thus Eco ends the book with a challenge: "But because the ability to pick up the challenges of chance (without throwing the blame on to the conspiracies of others) is among the secular virtues, why don't we begin to prepare ourselves for what may be the important dates of the third millennium instead of enquiring into the end of the world?" (228)

Each of the four authors/subjects of the book looks at contemporary (1999) doomsday prophecy from a different angle — from their own expertise and history. Gould dissects the inconsistencies in our calendar, Carrière talks enthusiastically about improvements in French wines. Eco says, "People are paying no attention to it [year 2000], other than to arrange to celebrate twice as much as normal by booking a hotel room in Samoa or Fiji." (172) While I agree with Eco on many of his points in *Conversations*, this dismissal of late twentieth century apocalypticism feels unnecessarily flippant. At the very least, one hopes he will examine why so many are apparently resisting end-times temptation at the time of his writing, but he doesn't do this.

Eco's omission may simply be a reflection of the structure of *Conversations*, as it is neither an account of prophecies nor an attempt to build an argument. The conversational structure enables each speaker to work with and build on previous interviews, but also lets them propose tantalizing arguments and observations that are left incomplete. However, one of its great strengths is still the way the manufactured conversation leads four very different thinkers to

look at many commonalities among prophecies, and I found this useful. I will not enumerate the various directions of the discussion, but instead highlight the point I think is most relevant to the present survey — Christianity, and its influence on perspectives on time.

Time comes up in a discussion of the influence on concepts of time of religions that developed in what we call the Middle East (Islam, Judaism, Christianity). Briefly, the idea of linear time is a natural product of monotheist beliefs, where a Judgement Day is a key component. "In world history one can therefore isolate the group of three religions of the Book which believe in a vectoral conception of time, with a beginning and an end." (Delumeau in *Conversations* 48) If a deity is going to come to Earth, and make a final Judgement, then the implication for time is obvious, because if the Judgement is going to be final, there has to be an end. Therefore, time must be moving in one direction only--towards that end. Again, this belief in a universal vectoral finitude can be seen as an obvious consequence of the finite nature of human existence, but it is not a global phenomenon, and is fundamentally different from those human belief systems where time travels in cycles. "The arrow of time does not exist in ancient mythology," says Eco. "The arrow of time is indeed an invention of Christianity, but only insofar as Christianity is the heir of traditional Judaism." (185)

Pursuant to this, there is some discussion in *Conversations* about 'Kali yuga,' the Hindu age of destruction (99), which is estimated to have begun in 3200 BCE, and which we are in now. Carrière explains that at the end of the

yuga, "The world we know will disappear, but not for the first time." However, he says, "Indian time cannot be reduced to our own. It defies all human arithmetic." (105) It follows, he says, that we have no way of knowing when the end will be: "Some talk of fifty years, others of 3 million. It's very difficult to know how long a yuga lasts. Probably because, for Indians, that's not exactly the point." He points out that "you can't measure a circular phenomenon." (100)

This uncertainty about when the yuga will end is very similar to Christian uncertainty about when Judgement Day will come. In both worlds, the end has not been specified. It is predicted in the Bible, but no explicit date is written. In both traditions, there is curiosity about where we are in Time, relative to the end. Some Hindus speculate that we are always living in the Kali yuga, and we must behave appropriately, just as many Christians are of the mind that we must always behave as though Judgement is imminent.

The belief systems diverge here. The yuga is an ongoing state of affairs, situated in an endless loop of time. This means its occurrence, its end and the ensuing (Satya) yuga are inevitable, just like the events in the Book of Revelation. As people, however, we have no control over anything in the Book of Revelation, only our own fate. Furthermore, Judgement Day sits on an 'arrow of time,' one that has an ending. While we may be encouraged to behave as though Judgement Day is always around the corner, if we believe in it, we believe it will arrive, and when it does, it will be the end. It will only happen once, and we have only one chance. If we are in the Hindu Kali yuga, on the other hand, the yuga has already played itself out according to the cycle and will

do so again. As individuals, this is another chance to behave as well as possible, as our behaviour can affect the victory over Kali. At the same time, everything is unfolding as it should. When this yuga is over, another will start. As René Guénon says about the Kali yuga, “[t]he "end of a world" never is and never can be anything but the end of an illusion.” (Guénon “The End of a World”)

I find this aspect of time, and how it affects the issue of inevitability, a crucial issue when looking at the influence of apocalyptic predictions. I am drawn again to Whitehead’s impress and the impact of an arrow of time within it; and to Keller’s analysis of apocalypse as a motivator and unifier. The question of inevitability, as opposed to the possibilities for accelerating a positive end-time, or stopping a negative one, are brought into view, but the picture is hardly clear.

Longing for the End

Another kind of writing about the apocalypse is the book that traces the chronological sequence of apocalyptic predictions. Two of the best of these are Daniel Wojcik’s *The End of the World as We Know it*, and Frederic Baumgartner’s *Longing for the End: A History of Millennialism in Western Civilization*. But there are many, in the end compiling a baffling litany of failed arguments and predictions.

Frederic Baumgartner first focuses on millennialism, which he defines in his glossary as follows: “Originally, it referred to a belief in the 1000 year reign of Christ after his Second Coming; it has come to mean a belief in the complete transformation of the world at the endtime.” (Baumgartner xi) He provides an

excellent study of apocalypticism, especially in the Middle Ages and the Reformation in Europe, a time when millennialism flourished (though it seems to flourish at most times). There are key figures here: for example, in the 12th century Joachim de Fiore used visions to plot the stages of history, and was influential among royalty and clergy. (Baumgartner 63-4) In 1534 the Anabaptist Jan Bokelson in Münster recruited about 2500 people to wait for the end, and was followed in that city by Jan Matthys, who advocated death to all who would not be rebaptized as Anabaptist, and when he was criticized instead had non-Anabaptists expelled from the city. (Baumgartner 92) Baumgartner puts the millennialism of the Middle Ages and the Reformation, with its violence, nudity, free love, and anti-clericalism, in vivid relief.

The book goes on to look at Puritan millennialist movements and thence to millennialism in the New World: among them Mormonism, the Millerites, and the House of David. Wojcik also looks at similar material. Baumgartner outlines some of the paths that end of the world predictions took in the 20th century, as apocalypticists accommodated events around them into their prophecies. The science fiction of the first half of the 20th century, he says, was invariably apocalyptic, though often coupled with a glowing picture of what nuclear power could mean for civilians. Then “[t]he first detonation of the bomb provided apocalyptic images that set the tone for the next fifty years.” (213)

After 1945, visionaries were often visited by aliens who told them that the end of the world would come about through nuclear warfare, an end they should prevent by speaking out. In 1946, *Reader's Digest* published Wilbur

Smith's apocalyptic "This Atomic Age and the Word of God," (217) When the Soviets exploded their first nuclear bomb in 1949, the Cold War took over Western apocalypticism. Even the Virgin Mary spoke out against communism.

Daniel Wojcik stresses that the alien phenomenon should not be ignored, pointing out that its lore "has many of the attributes of a popular religious phenomenon: its own mythology, legends, and systems of belief." (Wojcik 177) Part of this mythology are aliens of both stripes, benevolent and evil, either bent on destroying our world or on providing salvation in endtimes. He lists the many instances of alien visitation that have been warnings about nuclear war.

In the late 20th century, the so-called New Age movement amalgamated spiritual and futuristic prophecies into a movement for peace and inner development. The 'New Age' in the name refers to the New Age that will come when this (bad) age is over. 'There is hope in each one of us' is basically the message, but in case we forget, aliens and dead people will visit some chosen ones and give us all messages. The New Age relies heavily on a mystique around Eastern (Asian) spirituality, but it can be argued that it is basically Christian in focus, because of the basic endtimes premise that Western proponents mix in.

Dealing with failure

Baumgartner gives a colourful and thoughtful overview, but he also goes into some depth about important aspects of apocalypticism, for instance, failure, and suicide. Failure is the foundation of skepticism among non-believers, and pre-arranged suicide can be its flip side. Suicide is the pre-emptive answer to the big

question all doomsday prophets have faced so far: what happens when the prophecy fails?

In fact, suicide prophecies make up a branch of doomsday prophecies. If they kill themselves, the prophets do not have to deal with failure because they are dead (or, admittedly, possibly on a space ship or in heaven.) In recent years, examples of suicide cults abound: for instance the Solar Temple cult, based in Switzerland and Quebec, which had a Christian focus, and the Heaven's Gate cult in the United States. Heaven's Gate worked with aliens and New Age philosophy and used the internet extensively. They killed themselves with the belief they could thus return to the Mother Ship lurking behind the Hale-Bopp comet before the world ended.

However, not all prophets are suicidal. How do the others deal with failure? The most comprehensive analysis of this question comes in the book *When Prophecy Fails* (Festinger), a detailed examination of a doomsday group in the US in the 1950s, led by Mrs. Marian Keech, and their reaction to failure. (Wojcik 181) The researchers concluded that the failure of a prophecy is not an automatic death knell for the organization of those who believe. Rather, a good leader can actually work with the failure to generate even more interest. Sometimes the prophet will admit to mistakes that have now been corrected. At other times, they will say doom has been averted, miraculously, or through their own efforts. In *Conversations*, Stephen Jay Gould concludes, "Well, if the event you were waiting for doesn't come along, you've got a choice. Either you renounce your belief, or you touch up the photograph: I didn't understand

things correctly, my calculations were false. And you work wonders trying to reinterpret the message so as to discover the real date." (*Conversations* 12)

In the 1800s in the US, in an instance of a popular prophecy that failed, William Miller calculated the date for the Last Judgement to fall in the year between March 1843 and March 1844. Through preaching, pamphlets, and newspapers, he gathered a following of about 100,000 people, and then had to recalculate in March 1844. The next time, he set a very specific date — October 22—and even more people were gathered in. The result was the ‘Great Disappointment.’ Baumgartner points out, “The Millerites showed the entire range of responses to the failure of the prophecy except violence...Probably a majority remained Adventists and sought an explanation for the failure.” (169) Miller himself (“possibly the least assuming of millennial prophets,” (168)) continued to believe that apocalypse was imminent, though he set no more dates. Millerites went on to join and found other millennialist religious movements, for example, the Wroites (Baumgartner 191) and the Seventh Day Adventists (Wojcik 26). Seventh Day Adventist Ellen White has an influence to this day. Eventually the Adventist Kellogg brought us corn flakes. (Wojcik 26)

My favourite example of a failed doomsday prophecy is Jesus Christ’s prophecy during the Sermon on the Mount, where he tells his followers that Armageddon will come during their generation: “Assuredly, I say to you, this generation will by no means pass away till all these things take place.” (Mark 13:30) That generation did pass away without those things taking place, but this has had no effect on the power of Jesus’ teachings (which is understandable), or

on Christian faith in his Armageddon prediction. Curiously, the failure of an apocalyptic prophecy has little effect on whether that prophet continues to be believed.

Conclusion

Apocalypticism is common and takes many forms, from the religious to the philosophical to the political. My survey of doomsday has taken me from the Book of Revelation, through Christian cults and political theory, and outward to alien visitation. In surveying a range of sources about apocalypticism, some things stand out: the question of the appeal of predicting doomsday; time and the issue of inevitability; and the use of doomsday as a motivator.

In assessing doomsday predictions and how they fit with each other, I can see the need for more specificity about individual predictions. There are questions raised in this chapter that can usefully be asked of any apocalyptic prediction, to better situate it in the context of apocalypticism:

Is the apocalypse inevitable?

Is it imminent?

Is it desirable?

Is it universal? Will it be the end of everything?

Why might people be convinced?

Will it be a societal apocalypse? Can it be brought on? For what purpose?

Will it happen in a non-specific distant future?

Is there a specific timeline?

Is it planetary?

And further, of significance to this paper:

Is it unwanted? Can it be prevented?

As noted in the introduction, there are many fascinating tangents associated with apocalypticism. Some that immediately come to mind are:

- cargo cults in the Third World
- the French Revolution
- the Ghost Dance movement among 19thC Native Americans

However, I hope I have selected a useful sampling to set the context for the apocalyptic predictions I would like to focus on more specifically: those in tabloid newspapers and in lay scientific magazines.

CHAPTER 2

CONTEXT:
APOCALYPTERATURE

WARNINGS FROM HEAVEN

MOST RECENT APPARITIONS AND VISIONS OF CHRIST, ST. MARY, SAINTS AND ANGELS IN USA, MEXICO, ITALY, SPAIN, AND FRANCE WARN OF WAR, SCHISM, UFOS, ANTICHRIST, SATAN & MUCH MORE IN NEW ALARMING MESSAGES.

Send \$2.00 for KIT of over 50 documents and sacraments (for protection.)

• Advertisement from newsletter published by St. Paul's Guild.
(Wojcik 124)

Right from the outset, in the Book of Revelation, communication has been absolutely essential to apocalypticism. A big part of knowing when the end of the world will come, and what will happen, consists of telling others the news. As I noted earlier, John of Patmos was repeatedly reminded by beings in his vision of his duty to write about the things he saw. Many visionaries have followed his communicative example. For example, Hal Lindsey drew on apocalypticism to write the most popular non-fiction books of the 20th century, popularized accounts of the Rapture (*The Late, Great Planet Earth*; *The 1980s Countdown to Armageddon*; 666). Veronica Lueken of Long Island NY published a regular

newspaper, *Roses*, about her visions — the Bayside Apparitions — including photos of herself while she was seeing the Virgin Mary.

If all that was wanted from apocalyptic predictions was an assurance that the world is going to end in a Final Judgement, there would not be so many predictions. The Book of Revelation would suffice. However, the lack of a date, or any clear signs, in the Bible allows the Book of Revelation to be reworked as needed by the people who want to use it.

Apocalypse as political text

I return, then, to the possible motives for apocalyptic prediction. The Book of Revelation is in many ways a work of hope. It follows that in times of despair, the message of the apocalypse is persuasive. Simply put, it shows us a way out. When a political thinker has outlined the details of an oppressive situation, apocalypse can work as a salve for those who now see themselves clearly at the bottom.

Similarly, war propagandists have used apocalypse to encourage people to take up arms against an enemy framed as the creator of a frightening situation. This can range from proposing that the enemy is the Antichrist (or just an Evil Empire) to asserting that the other side is destroying life as we know it. For US Christian apocalypticists, the move from the Soviets to Islam as Antichrist has been fortuitous, as “It was never clear why Russia would want to invade

Israel, but Muslim hostility was well known and apparently implacable.”

(Baumgartner 243)

As a particular kind of persuasive writing, doomsday prediction is remarkably strong. Those making predictions use the tried and true formula of emphasizing problems in order to solve them. The problem can be the bad state of the world (usually pretty hard to dispute), and the solution can be faith that imminent doom will wipe the world and its problems away. This doom can be Christ's Second Coming, or it can be a destruction of the prevailing (bad) social order. It can be a short step from this wish for an apocalypse to proposing to bring the desired apocalypse closer in time. While some leaders choose to point to life after death as the time when justice will reign, others choose to see the Book of Revelation as metaphor, and provide concrete hope for their followers by proposing to bring about a metaphorical apocalypse. This is where much hopeful rhetoric is generated. Witness writing from many revolutionary movements, designed to bring people together to turn despair, outrage, and indignation into action. Via Ernst Bloch in *The Principle of Hope*, Keller cites Engels in 1842, before the *Communist Manifesto*:

The self-confidence of humanity, the new Grail around whose throne the nations jubilantly gather...This is our vocation, to become the Templars of this Grail, to gird our swords about our loins for its sake and cheerfully risk our lives in the last holy war, which will be followed by the millennium of freedom. (Bloch 515, Keller 184)

On the other hand, the same set of problems can be solved through a reversal, where doom itself, as exemplified in the bad state of the world, is the problem, and the solution is to work to avoid it. This is a familiar persuasive

tactic, relied on these days by the anti-nuclear and environmental movements. Here, the vision of apocalypse is not an engine of hope, but of such powerful loss that it must be stopped. Hope lies in keeping it from happening. The assumption is a secular one, that the end of the world is going to be a bad thing in a material sense.

Depending on the reader, each solution has its appeal, and both of these ways of using apocalypse to generate action can be effective. Both have their pitfalls, too, viz. — Apocalypse Now can lead to self-righteousness. “Prophetic movements can become elitist and legalistic in their search for holiness. If one believes that they have the new revelation, then it is easy to believe that they are in some way a better, higher, or more holy people of God.” (Davids: “What went wrong with Montanism?”) This confidence that they are in the right often leads apocalypticists to violent and impulsive behaviour in the name of the End. To choose two examples at random: the events under Jan Matthys in 16th century Münster; or the guillotining by the Jacobins during the French Revolution.

On the other hand, Apocalypse is Coming can give rise to despair, and relatively quickly to numbness. If the audience is not looking forward to the end of the world, and does not see the possibility for successful preventive action, they can move to inactivity, or as Keller points out, protective indifference. “Yet warnings of social, economic, ecological or nuclear disaster have become so numbingly normal that they do not have the desired effect on most of us, who retreat all the more frantically into private pursuits.” (Keller 14)

Not surprisingly, there are those who mix the two tactics — which works if secular concerns are separated from spiritual ones. Thus we can fear the end of the planet through our own hubris or stupidity, and still look forward to Judgement Day when the good will rise to the top. A right wing leader can call a communist the Antichrist, and spur fundamentalists to action against him, even though those fundamentalists also believe that the battle against the Antichrist has already been written, and that they will win.

When those who hope to prevent an apocalypse come into conflict with those who think it is inevitable, the results are strange. One notable example of this is the struggle by environmentalists for conservation during the Reagan administration in the United States. At that time, millennialist Christians, who had faith in imminent apocalypse, held positions high in the US government. In response to a question about the environment (for which he was responsible) Reagan's first Secretary of the Interior, James Watt, told a committee of the House of Representatives, " 'I do not know how many generations we can count on before the Lord returns.' " (Keller 4) It is hard to argue about saving forests with someone who believes the Lord is coming soon to destroy them Himself. This debate, between on the one hand those who think the environment needs to be saved and fast, and on the other those who think the urgency is fictitious or exaggerated, is a classic debate in environmental politics.

Clearly, politics and apocalypse often go hand in hand, and persuasion plays a huge part in the entanglement. However, there are so many interpretations of the end, so many perspectives on the route there, and so many

firm views about its desirability or not, that the old adage about strange bedfellows hardly seems equal to the task. One classic example is that of fundamentalist Christians who support Zionism. Why? Because in the Book of Revelation it says that if Judgement Day is going to happen, Jews first have to build the Third Temple in Jerusalem, and a powerful Israel is the only way this is going to happen. Addressing a group of Jewish leaders, Ronald Reagan said, "Israel is the only stable democracy we can rely on as a spot where Armageddon could come." (Keller 5) We have Christians in the United States breeding red heifers for ritual use in the building of a Jewish Temple. This is because a Jewish state (Israel), a Jewish Jerusalem and a rebuilt Third Temple are essential preconditions to the Second Coming, and a red heifer is ritually necessary for the last of these. (Wright "Forcing the End")

I raise these many political convolutions as an important element of understanding written predictions and what the goals of their writers might be. It is clear that these goals can vary wildly. Apocalypse can be a motivation for both sexual freedom and abstinence. (An example of the former is the Heresy of the Free Spirit in medieval Europe (Baumgartner 73-4); and the latter, Heaven's Gate (256-60)) It can serve as a rallying point for rebellion against institutional policies. It is valuable politically either as an inspiration or a deterrent.

Closely linked to these is inevitability. Obviously, this is one of the biggest questions facing philosophers and theologians alike, and there is not room here to do it justice. However, inevitability affects political apocalyptic predictions specifically, since it affects the ability of the person making the prediction to

persuade people to political action. That is, if the future can't be changed, why try to change it?

Apocalypse as puzzle

In many ways, the Book of Revelation presents itself as a puzzle. There can be satisfaction in figuring it out, and a desire to tell others when one has. Combine this with the importance of the book to Christians, and any plausible solution is compelling to readers too. I find that even apocalyptic predictions based outside the Bible (those of science, for example) use this code-breaking format. It is satisfying to know that a problem has been solved, even if the solution is undesirable.

Like anything where apocalypse is concerned, there are many approaches to this problem. Most importantly, apocalypse is more frequently the premise for the puzzle than it is an inevitable solution to evidence. That is, someone who already believes in apocalypse as predicted in the Book of Revelation will then set to work on the puzzle the book presents. They will then present their solution as a prediction, adding the legitimacy of how they arrived at it to their arguments for apocalypse. An example of this is the work James Ussher did with Isaac Newton in the 17th century. Newton lent his scientific astronomical knowledge to Ussher's theological aim of setting a date for Armageddon. (Baumgartner 134)

Even someone who is not basing their apocalyptic puzzle-solving in the Book of Revelation (for example, basing it solely in science) may be basing their prediction in the urgency of apocalypse as deterrent, or in their own belief in it. Thus if they think apocalyptic conclusions will be effective and necessary, they may begin with a general picture of environmental apocalypse, and then give extra weight to specific evidence for their position. Taken as a complete picture, this idea of how environmental science works is a rationale for continued planetary irresponsibility. However, this kind of puzzle solving is undoubtedly part of how a scientist makes his or her choices for research and experimentation. It certainly affects the satisfaction gained from solutions.

Tabloids

The assumption common to all this apocalyptic writing — political, religious, motivational, deterrent — is still a human willingness, in the West, to believe that the end is imminent. It may be wanted or unwanted, but there is still an element of human nature that will accept that it is coming. I think that this is the basic idea that allows writers to mix prophetic traditions to great effect, either to gain followers or to simply sell papers. Which brings us to the tabloids.

Tabloids are a prominent feature of contemporary popular apocalypticism. Because of their location in corner stores and supermarkets, they are highly visible in everyday life, even to people who have no interest in them.

When they feature Endtimes on the cover, a wide audience sees their apocalyptic prediction.

Furthermore, these apocalyptic publications exist to be purchased. This commercial motivation for writing is different from a desire to influence followers religiously or politically. Instead of using an apocalyptic argument to influence a specific course of action or faith, the writer is simply selling existing apocalyptic assumptions. The fact that they do sell is an indication of the popular appeal of apocalypse.

What kind of apocalypse is this? For tabloid readers, this is an Armageddon that is on the one hand frightening and inevitable, and on the other joyous for the faithful. Eclectic, primarily Christian, dramatic, sensational, and entertaining. "Terrifying new Ice Age begins in 2004" (*Sun* 29 Oct. 2002) "End Times Prophecies Coming True! Fiery vision of Jesus reveals if you will be saved — or left behind!" (10 Dec. 2002) In *I Watched a Wild Hog Eat My Baby!* Bill Sloan notes a truism of newsrooms:

(1) In its most socially powerful and financially successful form, journalism is at least as much about playing on the reader's emotions as about disseminating information. (2) The best way to sell lots of papers is by entertaining the masses, not by enlightening them."
(Sloan 18)

Using entertainment to sell papers is what tabloids do best, and they do it with the apocalypse too. These are not articles that build an apocalyptic argument. Rather, they play on the excitement of doom, the fires and earthquakes and visions.

Other mainstream media outlets deal with apocalypse. *Time* magazine frequently features it — they even did a recent article on the end of the universe (Lemonick) — and they want to sell papers too. Environmental apocalypticism has a decidedly mainstream audience. However, *TIME*'s audience is different from the tabloid readership. *TIME*'s readers can be entertained by long articles, for one thing. Sensational apocalypticism as entertainment has been left to the tabloids, by and large.

Do tabloid readers take the predictions seriously? Maybe, since they are as vulnerable as anyone to fear of their own death. It is important to remember that the predictions in tabloids are as verifiable — that is, not at all — as those in the *TIME* article mentioned, or in the Book of Revelation itself.

We know that apocalypse has an audience. What I think is significant here is that apocalyptic sensationalism has an audience. Therefore, written apocalypse strikes a chord with readers, even when it is not paired with a persuasive motive. Looking at apocalyptic tabloid writing becomes a way of assessing the popular appeal of the End, serving as one window on popular interest in doom.

Conclusion

Apocalypticism of all kinds is about communication. In the Book of Revelation, John is charged with the task of using writing to spread the word about his vision, and this sets the tone for later apocalypticists. This vision is used in different ways to develop written apocalyptic predictions with different effects

on their readers. The common assumption is that the end is coming. At times the writer presents new evidence to explain events in Revelation, at others uses contemporary ideas to solve Revelation's riddle, and sometimes Revelation is not mentioned at all. The writing ranges from religious tracts to revolutionary speeches to scientific reports.

Apocalyptic writing is persuasive and captivating, because of its implication that everything can be changed. It is used to inspire Christians, yes, but it is used to inspire secular political activity too. Conversely, the fear of apocalypse is also used to encourage political action, to prevent it. The bottom line is that readers are interested in reading about endtimes, even if, as in tabloids, there is little else to the story.

CHAPTER 3

LOOKING AT THE *SUN*

I noticed a headline among the cheesier papers: "BIBLE PREDICTS WORST-EVER WEATHER —Scriptures Forecast Dark Days Before world Ends." A "leading Bible expert" then capped his "dark and deadly forecast" with a citation: "In Revelations [sic], it is written, '...there was lightning and rains and thunder and earthquakes and great hail.'" So instead of nuclear war with the Soviets or with Saddam, bad weather is now God's chosen weapon of doom. Deadly heat will kill thousands, etc. Just a variation on my own ecological fears, I thought, though the *Sun* made no mention of any human responsibility for this weather from hell.

Catherine Keller
Apocalypse Now and Then
(Keller 3)

In the last chapter, I noted the particular niche tabs occupy in apocalyptic writing. Their sensational apocalypse is popular. I am curious to look at what apocalyptic tabs do in more detail. I want to see what apocalyptic assumptions their writers make, if they offer hope, and who their readership might be.

A bit about me and the tabloid genre

Tabloids have a negative reputation for being sensationalist, silly, and unbelievable. A lot of people take a measure of pride in being smarter, better educated, not as gullible as, someone reading the tabloids. In fact, I would go so far as to say that in many circles, reading a tabloid is tantamount to putting stock

in illicit reading material. It is certainly not quotable reading material, not at many a dinner party.

Two things give the lie to the seemingly universal disregard for tabloid journalism — first, tabloids are widely available and perforce widely purchased; and second, there is often not much difference between a tabloid and ‘higher class’ gossip magazines like *People* and *Vanity Fair*.

Tabloids are available in grocery stores and convenience stores. This availability is not restricted to poor neighbourhoods. Rudimentary knowledge of a profit system reminds us that a 7-11 in Kitsilano is not going to carry a magazine if no one is buying it. My point is, someone with a BA and an SUV is picking the tabs up. Tabs are entertaining, and though their roots lie in an appeal to less educated people, the entertainment might well transcend readers’ educational barriers.

Although tabs are primarily about sensationalist entertainment rather than sober argument, tabloid journalism can also be at least as tough minded and thoroughgoing as that in other available popular magazines. Instead of seeing mainstream magazines as ‘truthful,’ in opposition to tabs, perhaps it makes more sense to see them both as part lure and part reportage, in differing relationship.

In addition, mainstream journalism is far from universally serious — face it, if you are going to read a horoscope too general to have any astrological meaning, those in *Glamour* and in the *National Enquirer* are pretty similar. Even astrologers would agree that neither one is terribly reliable as a life guide.

How many of us have actually read tabloids to formulate our criticism of them? I ask this because I buy tabloids now. I haven't always done so. Like ordering something out of the back of a comic book, it just was not a possibility, or something that anyone I knew had done. Thankfully I can now (thanks to my master's project) cover my tracks by calling it 'research.' Phew.

The first tabloid I purchased was the *Weekly World News*, the modern source of all the best headlines. In just one issue: "Space aliens stampede 400 sheep to their death!" "World's fattest twins arrested for stealing the world's fattest cat!" "Shrunken head of Jimmy Hoffa found — in a Florida souvenir shop!" (27 Aug. 2002) In *WWN*, entertainment is clearly a top priority, and I am entertained. For me, a glance at *WWN* quickly makes it difficult to take the stories at face value. The writers certainly don't, and this reader would be hard-pressed to believe the overtly badly modified photographs. Columnist Ed Anger, a big source of laughs ("I'm pig-biting mad"), was developed as a parody of American right wing bombast, though it is not clear how many of his readers appreciate this.

I read *WWN* as satire, in the vein of *Mad* magazine, and enjoy the imaginative absurdity. Do other readers have the same perspective? It is hard to answer that, though I feel safe in asserting that they buy the magazine primarily for its entertainment value.

Other tabloids are slightly different. Each magazine has its own character and specialties — *Weekly World News* is wacky, only the *Sun* does the apocalypse, the *Globe*, the *Star* and the *National Enquirer* all do celebrity shockers, but they

divide up their areas. The *Enquirer* was commended by such dignified publications as the *Los Angeles Times* for its coverage of the O.J. Simpson trial, (Sloan 196) and then moved on to the Jon Benet Ramsay scandal. The *Globe* is currently on Michael Jackson's case.

Tabloids are often self-aware publications with intelligent writers and photographers. Studies of 'Tabloid Valley' bear me out (Kamp, Alter). Generoso Paul Pope, Jr., the father of the modern supermarket tabloid, graduated from MIT, at age 19. Most journalists working on tabloids are Ivy League graduates. Many are journalists with excellent mainstream credentials, as Bill Sloan notes in the preface to *I Watched a Wild Hog Eat My Baby!* (Sloan 7-8) And while the *Weekly World News* is a humour magazine, other tabloids do break stories and bring up issues other publications won't touch. They are much less tied into the PR machinery of celebrity and politics than mainstream magazines, and will break rules. A recent TV movie (*The Biographer: The Secret Life of Princess Diana*) documented the story of Princess Diana's sensational memoir *Diana: Her True Story*, a book based on secret correspondence with *London Daily Mail* reporter Andrew Morton. Though he was a tabloid journalist, she felt he was the only writer likely to take her seriously in her complaints about the English royal family.

Invasion of the tabs

The term 'tabloid' refers to a printing format — the tab — which is half the size of a regular newspaper. That is, locally, at present, *The Vancouver Sun* is a regular newspaper, and *The Province* is a tab. Think *The Vancouver Sun* folded in half and turned sideways. Supermarket tabloids are never printed as tabs anymore — they are cheaply produced full-colour magazines (except the *Weekly World News*, which is black and white). However, tabloid history is in the tab format and what it enables — tabloids are smaller than regular newspapers, easier to hold and easier to read, easier to print with a large photo and a large headline on the front with no story accompanying it.

Bill Sloan traces the roots of the modern supermarket tabloid on this continent back to the 'penny dreadfuls' of the 19th century, publications aimed at the lower classes and unabashedly focused on gore and sensationalism.

"Benjamin Day's *New York Sun* and James Gordon Bennett's *New York Herald* were the first American dailies aimed less at upper-class businessmen and politicians than at an audience of semiliterate, urban working people." (Sloan 18) Then came Joseph Pulitzer (yes, he of the top prize for journalism) and the *New York World*, which was even more melodramatic. In Pulitzer's words, the *World* was "'original, distinctive, dramatic, romantic, thrilling, unique, curious, quaint, humorous, odd [and] apt to be talked about.'" (Sloan 19) Pulitzer was soon at war with William Randolph Hearst and his sensationalist paper the *New York Journal*. Hearst is still talked about as a paragon of sensationalism. His

biographer W.A. Swanborg calls one of his stories “ ‘the orgasmic acme of ruthless, truthless newspaper jingoism.’ ” (Sloan 23)

The tabloid format was successful in the UK from the 1890s, but in the US, the tab only caught on (and became associated with scandal, sex, and gore) with the formation of the *Illustrated Daily News* in 1919. The astounding success of the *Daily News* gave rise to copies (*New York Mirror*, *Midnight*, *New York Evening Graphic*.) Different entrepreneurs brought their own stamp to different publications, some of the most notable personalities being Generoso Paul Pope, Jr., who in the 1950s made the *National Enquirer* the first national tabloid, and John Vader and Joe Azaria of Montreal, who founded *Midnight*, and the *National Examiner*. Major companies publishing tabs have been Allied News, Globe Communications, and American Media.

Sloan says the backlash against tabloids following Princess Diana’s fatal car crash has meant a slide for the genre. However, he points out that concurrent tabloidization of the mainstream press has also meant that “the tabs were left with nothing to add.” (209). Several commentators have noted this — the two styles of journalism are slipping closer together, and the loser is the tabs, who have long held crass sensationalism as their exclusive purview. Their relatively infrequent (weekly) publication, and poor photo quality makes them poor competitors. The one area where tabs still seem to have a monopoly is sensational apocalypticism.

On the other side of the Atlantic, ‘tabloid journalism’ means something slightly different. The tabloid format papers focus on gossip and sex pretty

exclusively. People high up in government, and the royal family, are a real focus, and scandals involving them seem to sell papers, no matter how nondescript the scandal.

Here in Canada, we have two kinds of tabloids. On the one hand, all of the US supermarket tabloids are available in our supermarkets. We also have the Rupert Murdoch *Sun* phenomenon. This is not *The Vancouver Sun*, or the supermarket tabloid *Sun*, but the tabloid papers in Calgary, Toronto, and other Canadian cities. These papers make a show of regular reporting, but they are also vehicles for some extreme right wing histrionics and features like the scantily-clad 'Sunshine Girl.'

With all the *Suns*, nomenclature gets confusing for a Vancouver resident, but in the present paper, the *Sun* we are concerned with is a tabloid published in Florida by American Media, Inc. It's the colourful magazine that puts the apocalypse on the cover every few weeks, the one that Catherine Keller writes about at the beginning of *Apocalypse Now and Then*, placing it "among the cheesier papers." (see chapter epigraph above)

Sunsational

Doomsday has long been a part of the regular fare in the supermarket tabloid the *Sun*. Relatively recently, on the cover of their September 11, 2001 issue (on stands by 9-11, and produced long before) they exhort readers: "Urgent! You Must Prepare For the Apocalypse Now!" This is classic tabloid material — how

and why and when this preparation is to take place is barely discussed in the publication itself.

Predictions of imminent doomsday appear on the cover of the *Sun* with some frequency. In some periods (for example during October 2001), predictions and warnings are on the cover almost every issue. Nonetheless, they do not take up the whole paper. Some regular features of the *Sun* are jovial bits of celebrity gossip (stars and their pets, celebrity profiles); baby photo contests; an advice column from Psychic Sarah; stories of curses, the Loch Ness monster, and UFOs; titillating romantic fiction; exciting mystery fiction; horoscopes; crosswords; and an assortment of poorly corroborated news.

Among these many regular features, prophecy and the apocalypse are clearly a big factor in selling papers. A frequent special feature is a 'bonus prophecy insert.' These inserts vary in length and focus. Sometimes they include prophecies about new cars, and life like the Jetsons, at times they include wacky happenings in tech crazed Japan, and often they are all about horoscopes and romance. However, apocalypse is often the topic chosen to sell the paper. What kind of apocalypse is this?

Christianity is the bedrock of the *Sun's* apocalypse. For example, in August 2001 'biblical scholar and TV personality Dr. Andrew Fraser' looks at the present day in terms of Endtimes writings in the gospels of Matthew, Mark, Luke, and John. (21 Aug. 2001: 11) Matthew wrote about the present strife in the Middle East, he says, and Luke was concerned about global warming. Among the seven signs that Endtimes are nigh are the growth of the Internet, the rise of

the European Union, and the release of the Fourth Prophecy of Fatima. (Fourth? (31 Aug. 2001: 11))

Despite all this warning, it is important to keep faith and hope. ‘Stunning revelations from the world’s great religions!’ proclaims a headline in the October 8, 2002 issue (23). These great religions are: the Hour of Power with Reverend Robert Schuller, Catholicism as exemplified by Bernadette Soubirous, and the word according to Billy Graham. “Well-known evangelists and visionaries alike warn that the world could well be teetering on the brink of apocalyptic destruction — but also caution us not to lose hope, for faith will see us through!” (23)

The Virgin Mary.

Within this, the *Sun*’s apocalypticism most often incorporates the Virgin Mary. Specifically, the *Sun* writes about the Virgin of Fatima and the Virgin of Lourdes, different incarnations of the Virgin as she is represented at those sites. Fatima and Lourdes are meaningful holy sites because of famous historical visionary experiences there. The Virgin was first seen at Fatima, Spain in 1917, and the *Sun* has reported many subsequent visions. She was seen in Lourdes, France in 1858 and also appears there in *Sun* reports of new visions. The apocalypse she predicts is the Second Coming of her son Jesus. By extension, prophecy also comes from the Pope and the Vatican.

Fatima

The original Fatima visions came to three shepherd children. Since then, as pilgrims flock to the site, other visions have appeared. The *Sun* prides itself on having complete coverage of the many Fatima events: "Since then, Fatima has been the scene of numerous prophetic visions from the Virgin, many of which have been reported in the pages of the *Sun*." (4 Dec. 2001: 10) "[Y]ou've read about many of her prophetic utterances right here in the pages of the *Sun*." (30 Oct. 2001: 31)

An important part of the Fatima story is three prophetic 'secrets,' given to the children for safekeeping. The first two of these ostensibly dealt with the two World Wars and the fall of the Soviet Union. The third 'secret' which was to be revealed in 1960, according to the only surviving visionary child, remains in the possession of the Vatican, and is still unreleased to the public ("[T]he Vatican has officially refused to disclose the contents of the Third Secret." (5 Nov. 2002: 18)) The *Sun* is privy to leaked evidence from the third secret, however, viz. "certain high-ranking cardinals have defied the official edict and released some of the contents...— a description of the Endtimes." (5 Nov. 2002: 18)

Despite supposedly reliable leaks, speculation abounds around the actual content of the sealed prophecies, and when the final one will be opened. The mystery of the Third Secret makes for continuing possibilities for prophecy from Fatima visions. Typical of these is an account from a US woman in the December 4, 2001 issue, who, when in Fatima to pray for her daughter, heard and saw the Virgin, who gave detailed Endtimes predictions. In September 2001, the ongoing Fatima saga was combined with a murder investigation and cover-up, drawing

on the tabloid's mystery focus and on venerated tabloid histories of gore and police machinations. Complete with a photo of the corpse. (11 Sept. 2001)

Lourdes

The Virgin Mary first appeared at another prominent shrine, Lourdes, France, in 1858, to a 14 year old girl named Bernadette Soubirous. A glowing figure told Bernadette to dig in the soil, where she released a spring, the source of Lourdes Holy Water and the shrine at Lourdes where millions make pilgrimages to be healed.

According to the *Sun*, " 'What many people don't realize about Lourdes is that, like at Fatima, there were a number of prophetic truths entrusted to Bernadette...they have been kept secure for over 100 years.' " (6 Oct. 2002: 23) These truths are in the possession of a convent instead of the Vatican, but the implications remain clear for a nefarious Catholic administration.

I have gone into some detail about Lourdes and Fatima here, because these events are the cornerstones of *Sun* apocalypticism. They have certain things in common.

First, the Virgin Mary appears as a loving figure, an ideal mother concerned about her children. However, in both cases, she also provides quite detailed accounts of the horrors of the Endtimes ahead, and warns followers about great tribulation, e.g. " 'Thieves and murderers will run rampant through your streets. Your judges will despair. Your prisons will overflow.' " (5 Jun. 2001

25) Can the planet be saved? No, but individuals can. "The road to salvation is through prayer and devotion." (4 Dec. 2001: 10) Repeatedly, visionaries are encouraged to stay on the path to salvation, and get on the right side in the battle against the Antichrist. There is much reference to the Bible, and particularly the events of the Book of Revelation.

Like other doomsday prophets, the Virgin Mary, as she appears in the *Sun*, anyway, is not afraid to ascribe a specific date to the End. In a relatively random sampling of the *Sun* from 2001 and 2002, the date for the Second Coming is variously set. Most have passed, but there are still some coming — " 'If these prophecies continue to unfold at their current rate, this could happen as early as Christmas 2003. What a Christmas that would be!' " (Michael G. Hayes, Ph.D., prophecy expert and retired military consultant, (10 Dec. 2002: 27)) The apparently continuing readership for issues of the *Sun* in which the Virgin predicts apocalypse shows once again that it is not the specificity of a prediction that has appeal. Believing in imminent apocalypse is an emotional, not a logical point of view. The Virgin Mary presents a terrible situation, to which she also presents an individual solution. While we are encouraged to be loving, it is not intimated that this will in any way change the bigger situation. Saved and off the hook in one stroke. Why cavil about her being wrong about the date? She's the Virgin Mary, and I am saved!

Of course, purely religious arguments of this nature do not have substance for everyone. For this reason, the *Sun* brings in experts to comment on the Virgin's prophecies. These are scholars, some with PhDs from unnamed

universities, ostensibly people who study the events at Fatima and Lourdes and draw objective logical conclusions. As noted in the next chapter, the mere implication that critical objectivity is being applied lends validity to almost any argument. Looking again at a random sampling of Fatima and Lourdes related stories in the *Sun* in 2001 and 2002, I can note a historian (11 Sept. 2001), a Lourdes scholar (10 Aug. 2002), a prophecy researcher (5 Nov. 2002), a Vatican investigator (5 Jun. 2001), and the world's leading Jesuit authority on Fatima (4 Dec. 2001). The other people in the pages of the *Sun*, men and women with average jobs, could be led astray, but not these people.

Catholicism

Much of what is described in the *Sun* about visions at Fatima and Lourdes is the troubled relationship between the Catholic Church and Catholics who claim to have visions of the Virgin. Around Fatima, the Pope ostensibly refused to release the Third Secret in 1960 as asked. He did reveal something in 1999, but, says the *Sun*, it was a lie: "The version of the Third Prophecy released by the Vatican is believed by many experts, Catholic and non-Catholic alike, to be incomplete and perhaps even an outright fabrication." (11 Sept. 2001: 24); "...Kurtz obtained a transcript of the entire Third Prophecy from a contact at the highest level of the British government - and it DIFFERED SUBSTANTIALLY from the official version released in 1999." (11 Sept. 01: 25) The Pope lies to his people and the Vatican is shrouded in secrecy, especially around Endtimes. So, in July 2001, the *Sun* can reveal the secret Vatican plans for the Endtimes: " 'Bishops have been

told to prepare for the worst, and not to reveal the truth to the masses for fear of inciting worldwide panic. But some of us feel the people deserve to know.' " This from a 'highly placed member of the Roman inner sanctum.' (3 Jul. 2001:23)

It is common among doomsday soothsayers to ascribe evil motives to the Catholic hierarchy. In the *Sun*, the Vatican is in conflict with the visionaries of Fatima, and a convent is in conflict with the legacy of Bernadette at Lourdes. Among other prophets, examples of this anti-Catholic establishment tendency abound. For example, Veronica Lueken of the Bayside Apparitions (first 'Marian' vision (vision of the Virgin Mary) in 1970, frequently until her death in 1995) said repeatedly that the Pope had been replaced with the Antichrist. In the Middle Ages many apocalyptic movements were based on criticism of the Catholic Church. In the 2nd century, the Montanists based their apocalypticism in opposition to the church as it then was.

What is significant about all this anti-Catholic feeling is that it is largely restricted to Catholics. These are believers with a complex relationship to the institution in which they have put their faith. They are invested in the structure of the Church, and willingly ascribe importance to statements if they are made by cardinals, nuns or former Popes. On the other hand, their criticism of the Catholic Church is much harsher and farther reaching than that of Protestants. There is an adage that only someone who believes in God can be a Satan worshipper, since the existence of Satan presumes the existence of God. Similarly, only a Christian can meaningfully talk about the Antichrist, and only a Catholic can appreciate the scandal of the Pope being the Antichrist — this

scandal only has power for someone who believes the Pope should be the maximum spiritual leader.

It must be noted that within this tradition, in publications like the *Sun*, there are Popes who are free from this doubt. For example the writing of Pope John XXIII can be turned to for accurate Endtimes prophecy: (5 Nov. 2002: 18). These popes seem to be trusted because they are already dead without having precipitated Armageddon.

By any other name

The *Sun* is not, however, a Catholic magazine, though it might accurately be called an endtimes one. Many different Christians, and other spiritualists, predict Armageddon in its pages. Why this might be is worth some speculation: if I presume that the goal of the *Sun* is to sell papers, the Endtimes is clearly something that people will pay money to read about. The readers, who are overwhelmingly North American, and mostly in the United States, want to know that the Endtimes are coming. They live in a Christian culture, and can be swayed by references to the Bible. However, they are not very picky about where their endtimes news comes from: most of it is Christian (Catholic and Protestant), but next in line are Nostradamus and Edgar Cayce (see next page), and there are also Native American and science prophecies. In October 2001, there was even a page about the Kali yuga, prefaced by a paragraph about the ubiquity of endtimes prophecy. The only references to establish the believability

of any of these pathways are the kind of experts alluded to earlier, experts with a decidedly interdisciplinary focus.

Edgar Cayce, known as the Sleeping Prophet, made predictions in the US in the first half of the 20th century. He went into trances, during which he made predictions and gave medical advice. While not strictly a Christian visionary, there is a Christian bent to much of his work, and he is credited with many of the same prophetic abilities as Biblical scholars. The *Sun* quotes him frequently. In November 2001, a 'distinguished professor of New Testament Studies' cites a newly opened letter from Cayce (shades of Fatima and Lourdes) and a newly discovered Dead Sea Scroll as "two unimpeachable sources" of signs the Endtimes are here. The faithful, as always, need not fear: "The vengeance of God will rain down upon the heads of all evil-doers. But his blessings will redeem the lives of all those who have worshipped him faithfully and with purity of heart." (13 Nov. 2001: 11).

And then there's Nostradamus. As supermarket prophets go, he takes second place only to Jesus. He is more common than the Virgin Mary. There are many things about him and his prophecies that explain why they are quoted so frequently. First, he wrote hundreds of years ago (he lived 1503-1566), in what now seems arcane language that is wide open to interpretation. Second, he was legitimized by the French royalty of the day, and for all the US admiration of their own republic, the culture south of the border continues to attach importance to monarchies, especially old ones. Third, Nostradamus had a wide range of interests, including astrology, medicine, kabbalism and magic. He is

credited with time travel, cures, and political predictions. He was a wealthy celebrity. There is something here for everyone.(McCann, Ward)

Nostradamus wrote more than 1000 predictive quatrains, many of which are interpreted after the events they supposedly predict. The issue is further confused by the assertion that many of his predictions were suppressed, and are very difficult to interpret because he endeavoured to keep them secret by writing in code. Understandably, Nostradamus experts abound. The *Sun* turns to Nostradamus with some regularity — “Nostradamus most accurate ever prophecies. What’s in store for you — starting right now” (12 Feb. 2002); “Nostradamus: How we’ll survive Endtimes terror” (5 Nov. 2002); “Nostradamus forbidden prophecies for 2003” (10 Sept. 2002).

God Bless America

“Nostradamus terrorism prophecies” boasts the *Sun* in the October 16, 2001 issue. This headline raises a distinguishing feature of *Sun* apocalyptic prophecy, which is its link to US politics. Like most Christian apocalypticists, prophets in the *Sun* relate the events of the Book of Revelation to contemporary political realities. They are always on the lookout for the Antichrist, but also make predictions of things like environmental devastation. The slant here is a pronounced focus on the readership, who seem to be Americans, of a populist right wing kind. In July 2001, hidden prophecies from the Vatican outline events clearly, with a focus on the Middle East and foot-and-mouth disease. Before 9-11, terrorism was already a threat to Americans, but Russia was the place that most

often loomed as the home of the Antichrist (11 Sept. 2001). In October 2001 (30 Oct. 2001), a Ukrainian seer predicts an Armageddon battle between Russia and China, and the fear that Russia will destroy Israel.

The events of September 11, 2001 spawned a rash of apocalypticism in the United States. The immediate assignation of blame for the attacks on the World Trade Center and the Pentagon to a group of religious fundamentalists only accelerated the desire to find doomsday in the attacks. This point is evident in a sampling of the *Sun* from the period immediately following 9-11. In fact, the cover of the November 13, 2001 issue features a photo of a cross made of iron girders erected on the site of the attack in New York City. With no explanation, the picture is paired with the headline "7 SIGNS JESUS IS ON THE WAY."

Since 9-11, the *Sun* has largely shifted to an even more overt patriotic American focus than they had before, following the lead of George W. Bush on where evil is located. Right off the bat, the magazine's logo went from a solid red with a slogan reading "America's best-loved weekly," to a modified stars and stripes with a variety of patriotic sayings: "United we stand," "Strong. Proud. United," and most frequently, "God Bless America."

As I've shown, apocalypse can serve as a political motivator in many ways — as an eventuality to prevent or bring on. In all cases, those who are privy to knowledge of the apocalypse can feel chosen. In the case of the post 9-11 *Sun*, the apocalypse is an excuse to promote the agenda of the US government. The Antichrist is now often Arab, as well as Russian. Osama bin Laden is mentioned repeatedly. Curiously, Nostradamus is credited with predicting that an attack on

Saddam Hussein could go astray and lead to more terrorism. (10 Sept. 2002: 25) (I guess we'll find out when there's an attack). One of these political apocalyptic prophecies is the account of an appearance by the Virgin Mary at Fatima in October of 2002. Her instructions, given to a US visitor, are quite specific: among them "Osama bin Laden is Satan's lieutenant," and "God has chosen America to be His champion." Most telling, "Victory in the war against terrorism will pave the way for Christ's return." (16 Oct. 2001: 11) Christ's return is what we want, remember.

Conclusion

With this overview, perhaps it is time to revisit some of the questions established at the end of Chapter 1, and see how they fit with the Endtimes predictions in the *Sun*.

- is the prediction universal ?

Yes. These predictions are universal in the sense that they apply to all God's creatures. Even when God is not mentioned specifically, the context is all of Creation, though the implication is that the planet Earth will be universally affected, and perhaps achieve a transformation into an otherworldly sphere. "...the end of time is drawing near, and you will be called to the great white throne of the Almighty." (5 Jun. 2001: 24)

- imminent ?

Yes. The point of most issues of the *Sun* that prophesy the apocalypse is to alert readers to the imminence of Armageddon. Repeatedly, articles specifically outline signs that Endtimes have already begun.

- with a specific timeline?

Yes. Specific dates are sometimes mentioned, though a nonspecific future is also a safe alternative. This future is not distant.

- preventable?

No. As Keller observes, the *Sun* often makes no mention of any human responsibility for signs of the endtimes, and usually talks about apocalypse as inevitable.

- able to be brought on?

Yes. The *Sun* even goes so far as to call out on the cover of the December 4, 2001 issue: "What you can do to hasten Christ's return."

- desirable?

Yes.

- what is the nature of the prediction?

These predictions are written as reportage. Often they are based in supernatural events, and faith based. Sometimes they are faith based and further justified thorough nominal academic veracity. Images are involved — fuzzy photos of regular people, photos of iconography and statuary, historical paintings, photos of unnamed events in nature or of military activity, and artwork of the Endtimes horror.

- who is being targeted with the predictions?

The readership is people who purchase the *Sun*, who seem to be from the United States, and willing to be believers and patriotic Americans. They cannot be very educated in media consumption or in the workings of the academic world. If they were, they would notice the inconsistencies in the paper. (For instance, I can provide examples of the same model being used for photos of two different characters in two different stories, in one he is a scientist (12 Feb. 2002: 7) and in the other a construction worker.(10 Sept. 2002: 46)

- for what purpose?

As noted above, I think the primary motivation is to sell papers. In terms of politics, it seems to be in the interest of the papers to maintain a readership that

continues to support the status quo. Politics are definitely involved, but not political change.

- why might people be convinced?

I think *Sun* readers are convinced for a host of reasons. First, I think they want to be. I think they are given information that is of relevance to them, for example, many instances of dealing with family safety. I think they are led to believe that they are privy to exclusive, urgent information. They can be moved to a desire for revenge against terrorists. And finally, I think many *Sun* readers find the excitement of the Endtimes appealing.

CHAPTER 4

CONTEXT:
SCIENCE

Apocalypticism is concerned with communication and persuasion, and the perceived legitimacy of a prediction has everything to do with terminology. In apocalypticism, popular meanings of terms are often the most significant ones, as a popular movement is most commonly the ultimate objective of apocalypticism. Whether a prediction is about the Second Coming or global warming, the goal is to make people believe that it is true. It is not so much that the reasoning must be sound, but that the target audience must be convinced that the reasoning is sound.

In the area of sound reasoning, tabloids are often seen as the most untrustworthy of sources. In the main, they might well be a poor place to turn for consistently verifiable reporting, but they are also entertainment, and provide a pop culture window on some of the values around us. When tabloids tap into apocalypticism, this can be said to show the appeal of endtimes in our popular culture.

At the other end of the pop culture spectrum of believability, science and scientists are the most trustworthy sources of all. Scientific apocalypticism is commonplace, and carries weight with large groups of people who would call

themselves skeptics otherwise. Why is this, and what clues can the history of science provide to scientific apocalypticism?

I have actually proposed three questions here. The project in this chapter, then, is to first evaluate some reasons why the word 'science' might carry so much weight; second, to see if it can be argued that scientific principles lead necessarily to scientific apocalypticism; and third, I propose it might work the other way, that if there is an initial desire to predict the end, subsequently science might then be bent to it.

I am choosing to look at the development of modern 'science' as it happened in Europe, beginning with the scientific philosophy of the 16th and 17th centuries. Like John Hedley Brooke does in *Science and Religion*, I am taking as a starting point the 1543 publication of Copernicus' sun-centred astronomy. This period saw the genesis of the scientific method that is taught in Canadian schools today.

Why do we trust the scientist?

'Science' is a word that has traveled across disciplines and systems for centuries, gathering and losing baggage of usage and definition as it goes. As a consequence, when I say the words 'science' and 'scientist,' in 2003, I can mean any number of things.

The common or popular meaning of 'science' in North America right now refers to the physical sciences, the sciences of high school curricula — physics,

chemistry, and biology. For most people, high school is as far as their participation in science goes. Even today, as governments encourage science and technology over the arts, the arts still boast the majority of post-secondary enrollment. Most of the population is not involved in post-secondary sciences at all, and has almost no ability to evaluate scientific arguments that go beyond the level of a high school textbook. This has served to mystify science for most people, and elevate scientists to another status — that of someone with inscrutable knowledge. In our culture, science now maintains a corner on epistemological legitimacy.

Part of this legitimacy comes from apparent adherence to the ‘scientific method’. The ‘scientific method’ (as the term is commonly used in our education system) is a method based in carefully constructed questions, and the search for repeatable, empirically verifiable answers. This is more than simple empiricism, as the method rests on a willingness to criticize and question anything, even one’s own results and theories. In *History of England*, David Hume praises the perfect scientist, Sir Isaac Newton, “Cautious of admitting no principles but such as were founded on experiment, but resolute to adopt every such principle, however new or unusual.” (Hume 65)

The European expansion of science after Copernicus’ revelation came to be known as the Scientific Revolution. European scientists of the time proposed that a willingness to be critical, and let empirical observations speak for themselves, could ultimately lead to objective truth. Most significantly, this truth would be free of religion’s attendant superstitions. In public perception, science

managed to draw a line between empirical inquiry and religious faith, and emerge as a widely acknowledged legitimized route to truth about the physical world. In 1991 in *Science and Religion*, Brooke alluded to this popular conception, while pointing out that in practice this line was never definite, but rather more like 'differentiation.' (Brooke 53-63)

Labelling historical periods is always risky. However, we can say that one of the consequences of this Scientific Revolution was the closely linked European Enlightenment. Enlightenment ideas have exerted a powerful influence in Western culture. In *What is Enlightenment?* the Enlightenment philosopher Kant added the exhortation 'Argue!' to the criticality of the new science. (Kant 389) He was positing that in addition to gathering empirical evidence, the progress of truth finding also rested on the employment of innate intelligence in a public Socratic dialogue. This idea is laudable, but it has proven to be impractical. Argument with a scientist is out of the reach of most people, because scientists have highly specialized education and language. Only scientists can argue with other scientists, and when they do, the lay person is on the sidelines, evaluating arguments using other than scientific criteria. Sometimes, we just choose a scientist, and take their word for it, as believers do with religious leaders and texts.

Science has its own internal policing system, but again, it is out of the reach of most amateurs. Even among those who understand the scientific system of verification and publication, fraud is perpetrated quite frequently. Among those who do not understand (or have not learned) how this system works,

fraud is not even necessary. To clarify, if I use any pretext to call myself a scientist, including a degree in any field from any university, for good or bad I can use the entire baggage of science (strict method, critical evaluation, ability to argue) as my own. Even if it is not my intent to defraud a reader, I have the power to convince them, because they probably believe that I am smart (able to pursue academic fields that they can't) and vigilant in my scientific practice.

This is very important to apocalypticism.

Regardless of how useful I might think the scientific method is as an epistemological tool (and opinions do vary), there is no disputing its power as a persuasive one. In many instances, the word alone is a trump card that ends the argument. Scientists have the power to make truth claims and be believed by a wide audience, and this adds power to their doomsday predictions, if they are wont to make them.

Because of this trust, the image of science as a political tool is complex. In Canada, the most public example of this is probably writer and broadcaster David Suzuki, who has parlayed a science degree and a sharp mind into a vehicle for many issues. I admire Dr. Suzuki, and respect his work, but I wonder how much argument he forestalls with his scientific academic credentials, even though they are often quite unrelated to the issues he is addressing.

It is my contention that this persuasive power of science is used in contemporary life with varying degrees of consciousness. On a basic level, the trappings of science are used in advertising, where footage of models and actors dressed in lab coats is jump cut with meaningless graphs to sell shampoo, cars,

and pet food. This is easy to dismiss as science, though it does work to sell things. Less simplistically, the label of medical science is widely used to advocate lifestyle changes for health and beauty, and to promote a variety of psychiatric procedures. The authoritative scientist is a familiar figure in helping us make decisions about everything from garbage bags to the state of the world.

Is science necessarily apocalyptic?

In Chapter 1, I illustrated the founding influence of monotheism, and Christianity in particular, on apocalypticism. Judgement Day is absolutely fundamental to Christian belief. If we say that Christianity is fundamental to science, science might then be necessarily apocalyptic. I think that science, as developed in the Enlightenment, and existing in contemporary popular imagination, has a strong Christian foundation.

The cultural ramifications of Christianity include “the arrow of time,” (*Conversations* 185) as Umberto Eco says — linear time. This influential arrow of time is in turn embedded in the scientific method, especially in terms of concepts like repeatability. Though physicists have now rejected linear time in theory, it remains an important scientific tenet in practice, both for the layman, and as a foundation for the experimentation that in turn has become the foundation for newer things.

It is in the context of science that Alfred North Whitehead talks of the impress of unquestioned faith. Whitehead is concerned with the deep impact of

Christian assumptions on rational argument and scientific methodology. He proposes that “the greatest contribution of medievalism to the formation of the scientific movement” is “the inexpugnable belief that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner, exemplifying general principles.” He continues, linking this observation to the Enlightenment belief in unalterable truth awaiting discovery: “It is this instinctive conviction, vividly poised before the imagination, which is the motive power of research: that there is a secret which can be unveiled.” (Whitehead 18)

Whitehead proposes that there could be no Enlightenment science without a Christian God, and that this is a consequence of European medievalism. “It must have come from the medieval insistence on the rationality of God, conceived as with the personal energy of Jehovah and the rationality of a Greek philosopher.” (18) Whitehead’s argument has been enthusiastically taken up by Christians who want to link their religion with science (Gosselin), and decried by those who are critical of his dismissal of the science in other cultures. However, if we accept that the image of science in our culture is based in the European Scientific Revolution, Whitehead’s argument bolsters the premise that this image (and the practice it denotes) is therefore also essentially Christian. Like Whitehead, I think that one’s core beliefs will influence one’s thinking in every way: “By this I mean the instinctive tone of thought and not mere creed of words,” he says. (18)

While scientists have long proposed that religion and science are essentially separate things, (perhaps with the same goal), I don’t think the

'instinctive tone of thought' is so easily dismissed. The early scientists were, almost to a man, raised Christian. Newton himself remained a lifelong practicing Christian, and lent his support to James Ussher's setting of a date for the apocalypse. Many of those who turned against the Church as an institution in the 16th and 17th centuries were deists, a monotheist practice. It stands to reason that the science these men practiced involved Christian assumptions, even if they were unaware of them. In the *Preliminary Discourse to the Encyclopedia of Diderot*, an Enlightenment classic, d'Alembert provides a schematic 'Detailed System of Human Knowledge.' (d'Alembert 144-5) The table divides Understanding into 'Memory,' 'Reason' and 'Imagination,' and squarely at the top of the Reason column sits 'Science of God.'

In addition, for all their praise of observation, early scientific thinkers were hardly strictly empiricist observers, since strict empiricism is limited as a route to meaningful conclusions. Hoping for truth, Hume reached the inevitable empiricist impasse of the conflict between 'a priori' (assumed before observation) statements, and 'a posteriori' (after observation) knowledge. A priori premises are guaranteed to be certain, but yield no information about sensory experience. A posteriori conclusions are sensory but inevitably uncertain, since the only way to predict how something will behave is on the basis of it having behaved like that before. Kant solved this problem (and it is a big one) by pointing out that time and space are both sensory and a priori. He based this conclusion in an assumption of the familiar arrow of time. Other thinkers used the intervention of a divine being to bring experiential data

together in meaningful conclusions. George Berkeley (a bishop) pointed out that Newton's forces were empirically justifiable only if they were accepted as a priori possible, and postulated that they might as well be called God.

On paper, the metaphysical basis of much of Enlightenment epistemology was a fixed world ready for the light of discovery. It was difficult for those in that world to imagine that the nature of the light would have an effect on what they saw, or that the world might be changing, or that they might be affected by what they already thought was true about that world. It was easy for them to reject knowledge based on the unseen.

I do not mean to suggest that Western science is nothing but Christian polemic, or that it is so Christian influenced that it is unusable outside Christianity or that I have forgotten that science has sometimes managed to bridge huge barriers of language and culture. However, I do think that it can justifiably be pointed out that Western science has many roots in Christian thought, and has been fundamentally influenced by them. If this is so, and given that Christianity is necessarily apocalyptic, science might well be necessarily apocalyptic, too.

Which comes first?

In Chapter 1, I surveyed some of the many apocalyptic predictions around me, their different perspectives, and some of the possible motives for this kind of prediction. Among these motives was social change, and I proposed that there

are two ways that apocalypse can be used as a motivator for social action — as hopeful inspiration, or as something to be prevented.

Many of the doomsday predictions that we encounter on an almost daily basis fall into the second category. I am referring to environmentalist doomsday, from global warming (practically the doom *du jour*), ozone depletion, deforestation, and so on. The substance of these predictions is usually scientific, and the purpose of them is as a warning, to encourage action and changes in behaviour. Usually these proposed changes in behaviour fit well with other, non-scientific, social action goals.

The question remains, does the science precede the warning impulse, or vice versa? It is true that scientists usually have a fair idea of what they are going to find before they start. Furthermore, as we saw above, science might be inherently apocalyptic. Science has a foundation in religious belief, and in many examples I have cited, scientists have worked from a priori religious premises.

However, in the case of environmental apocalypticism, to what extent are scientists beginning a study with the impulse to warn already in place? As I noted earlier, I am loath to embrace the picture of the environmental scientist as someone operating solely from a political apocalyptic agenda, perhaps because I usually agree with the political agenda. I am inclined, therefore, to accept that what is sometimes the case cannot be universally true.

In 2001, Bjørn Lomborg looked at the wealth of scientific apocalyptic predictions around him, decided that they might not be well-founded, and set to work to methodically dismantle the apocalyptic predictions that the

environmental movement holds dear. In *The Skeptical Environmentalist*, he intimates that the environmentalist 'litany' he is critiquing assumes apocalypse and uses science primarily as a warning device. (Lomborg) I will return to Lomborg and his motives later. For now, I must acknowledge this premise, and note that whatever the motive, environmentalists have chosen well, as scientists are widely believed, making science an excellent warning tool.

Science and Apocalypticism

Science, then, plays two key roles in relation to apocalypticism. First, its history, and its place in popular culture, makes it a trusted predictor. Second, its close links to Christianity place it squarely among the disciplines that are likely to consider the end of the world. It can function as a valuable persuasive tool for many things, apocalypticism among them.

What we accept as science is founded in intellectual developments that are strongly linked to Christian faith and philosophy. It is hardly surprising, then, that science has long been, and continues to be, a fruitful vehicle for apocalyptic prediction. Scientific apocalyptic predictions still carry more weight with educated and careful readers (myself included) than other kinds.

It was in this frame of mind that I embarked on a reading of John Leslie's book *The End of the World: The Science and Ethics of Human Extinction*. By that time, I had been reading many predictions of the apocalypse, most of them in the past, where dates had already come and gone, and arguments had been shown to be

ridiculous by subsequent scholars. Millerite explanations of astronomical events are patently absurd when the starry happenings have been explained away by scientists, and when predicted dates have passed with no Armageddon. I was used to this historical viewpoint, and able to look forward, too, and easily dismiss similar predictions that had dates still pending. I could confidently say that everyone is always wrong about Armageddon's timeline, that the Book of Revelation can be a book of hope, etc.

The End of the World is different from all these predictions because of its detailed examination of contemporary (late 1990s) science, and its ground in probability. Despite my cynicism about the accuracy of both science and apocalypticism, I found Leslie's reasoned and thorough-going writing emotionally draining and difficult to dismiss. I also found it a good starting point to look at scientific apocalypticism, as Leslie looks in some detail at every area of prediction.

John Leslie's *End of the World*

We ought to have some reluctance to believe that we are very exceptionally early, for instance in the earliest .001 per cent, among all humans who will ever have lived. This would be some reason for thinking that humankind will not survive for many more centuries, let alone colonize the galaxy.

Cosmologist Brandon Carter, as paraphrased by John Leslie
(Leslie 1)

John Leslie is a professor of philosophy at the University of Guelph, who has a capacious understanding of modern physics and philosophy of science. His book

begins with the 'doomsday argument,' as proposed by cosmologist Brandon Carter (see above). This argument is based in applied mathematics, and does not imply any definite conclusions about doomsday. Rather it states that it is highly unlikely that the humans alive today are an extremely small percentage of all the humans who will ever live, and much more likely that we represent about 10 percent of all humans, in which case it is likely that our race will end soon. This is a risk estimate. Its impact on scientific apocalypticism works in the following way. About the various current threats to human extinction (for example, nuclear war, disease, over-population), Leslie says, "even non-experts can see that the risks aren't negligible." (3) Most importantly, even if we calculate the various risks of these threats as small, and combine them, and still come up with a small risk estimate for doom, "Carter's doomsday argument would suggest that it should be re-evaluated as large." (3) Leslie reminds us that this argument is not a prediction in itself, but is rather about estimates and how to make them accurately. This can feel like small comfort as the risk estimates of apocalypse balloon. (Nonetheless, later, when I look at *The Skeptical Environmentalist*, I will wish for this kind of clearheaded estimation.)

It follows that before Leslie can address rebuttals of this argument, he must look at the predictions, the tools that we have for developing those small (but not negligible) apocalyptic risk estimates. He lists these "Threats to the Survival of the Human Race," with brief comments, grouped into broad categories, under the headings "Risks already well recognized," "Risks often unrecognized" (further divided into natural and man-made disasters), and "Risks

from Philosophy.” The list is long, ranging from nuclear and biological warfare (“biological weapons could actually be more dangerous than nuclear ones”), and disease (“many remain incurable”), to supernovas, a disaster from nanotechnology, and “the possibility of producing an all-destroying phase transition.” He ends with the risks from philosophy, which include Schopenhauerian pessimism, ethical relativism, and others. In light of what I earlier cited from Keller about US Secretary of the Interior James Watt, I found the following comment from Leslie under “Threats associated with religions” especially interesting: “It could be dangerous, for example, to choose as Secretary for the Environment some politician convinced that, no matter what anyone did, the world would end soon with a Day of Judgement. It could be just as bad to choose somebody who felt that God would keep the world safe for us forever....”(10)

Having touched on the many risks humans face, Leslie returns to the doomsday argument, noting, “So far, I have managed to find only one good ground for doubting it.” This good ground is that if we live in a ‘radically indeterministic’ universe, the doomsday argument would not run smoothly, though “[e]ven if it ran only rather roughly....[it] could have considerable importance. (18) Finally, Leslie says, “At least a dozen times, I too dreamed up what seemed a crushing refutation of it. Be suspicious of such refutations, no matter how proud you may be of them! Probability theory is full of traps.”(19)

Thus Leslie sets the tone for the book — a confounding combination of skepticism and well-structured arguments for doom. He proceeds to detail the

cases for risk in his long list of potential disasters: nuclear war, holes in the ozone layer, pollution, over-population, germ warfare, and the like. Some things stand out about this collection of fears and are worth pointing out. For one thing, Leslie has set the end of the human race as his parameter, so that when he concludes that something may well leave 10 per cent of us still standing, he doesn't count this as doom. Another thing is that Leslie is able to evaluate and argue with scientists in a way that most of us can't.

This chronicle of threats to the human race can feel like a relentless list of high risk, potentially apocalyptic situations. However, Leslie is serious about evaluating risk, and so he does reject some fears as far-fetched. Among these are, for example, the fear that humans will stop having children, disasters in nanotechnology, and extinction from a supernova explosion. I found it important to remember that part of his project is to see where risk can be reduced. "To get it to look small once more, we should then need to make vigorous risk reduction efforts," (3) and "[i]t's silly to think that human efforts could never increase the probability that doom would be long delayed." (239) These are notes of hope that I understand, and they relate well to the scientific apocalypticism that I encounter in my life. Leslie hopes that people will take the possibility of doom seriously, and do something to make it less likely. I interpret this to mean taking action on the issues Leslie raises. *The End of the World* is a good apocalyptic deterrent.

(There are other notes of hope in Leslie, too, though they are veiled in decision theory and games theory. That would be a different paper from this one.)

Don't you know we're on the eve of destruction?

(And what are you going to do about it?)

So — it is hard to read *The End of the World* without worrying at least a bit, which I found interesting. Clearly, as an educated reader, I succumb to the very things I am wary of about science. In other words, I do believe in some way that science and scientists have more and better access to truth in prediction than those who base their prediction in Christian theology or alien visitation.

I have already alluded to Bjørn Lomborg's refusal to succumb, and his book *The Skeptical Environmentalist (TSE)*. Controversy about *TSE* has been swift in arriving. In *Scientific American*, some scientists dismantled Lomborg's arguments piece by piece. I argued emotionally with acquaintances who agreed with Lomborg. This argument quickly became familiar — I think industry is bad, they think it is unfairly criticized. I am too idealistic, they have blinders on, I want us to do something, they are worried about oil companies in Alberta. Writ large, this is the dispute among Canadians about the Kyoto accord.

Again, science becomes a place where the intersection of politics and Armageddon reveals itself. Environmentalism sometimes appears to be built on the use of 'science' and 'scientists' to make apocalyptic predictions in order to stir

people to action about conservation of various kinds. This involves economic shifts, lifestyle changes, and political work. But what about the science?

Scientists' record on the apocalypse is no better than anyone else's. That is, there are a lot of predictions on record from someone calling themselves a scientist — and many missed dates. In the 16th and 17th centuries, when science and Christianity were closely linked, many a scientist lent their expertise to apocalypticism. Foremost among these was Isaac Newton, who helped James Ussher in his Biblical calculations, but there were also such figures as John Napier, the developer of the idea of logarithms, who predicted doomsday in 1688. In the 19th century, the law of entropy gave rise to the apocalyptic Heat Death theory. In 1968, entomologist Paul Ehrlich published *The Population Bomb*. The environmental movement has recently burgeoned as the locus for most scientific apocalypse, and these are predictions that are also calls for action of various kinds. Thus we have mass extinction predictions of the 1970s (didn't happen as expected) (Shaw 160), destruction of the rainforest (figures based in faulty science), and the ongoing concerns about the ozone layer and climate change. These are claims wrapped in science, religion and politics, and consequently difficult to assess on all counts.

A whole area of environmental apocalyptic prediction uses the familiar credo that it is humanity's fault. As Eva Shaw notes in *Eve of Destruction*, "We have been abusing our planet, they say. We haven't been sufficiently careful with this precious planet." (158) The idea that we caused environmental degradation is an excellent call to action — if we started it, we can end it — but such an

argument also gives rise to some other ideas that are perhaps less positive. First, there is the obvious idea that the planet will be fine, it is just humans who will die, and it is all our fault anyway. Related to this is the idea that people are not worth saving. Leslie looks at this argument in some detail from the standpoint of ethics, pointing out that many philosophers argue that there is no ground to believe that some things (i.e. human life) are really better than others (for instance human extinction), and says "I myself find their doctrines profoundly depressing." (Leslie 156) While Leslie's feelings are not necessarily a good basis for argument, he goes on to elaborate that it is absurd to propose that people live without preferring some things to others, and it is useful to see this basic preference as a ground for preferring to keep the human race alive.

Linked to this notion of the end of the human race is the familiar religious and political idea that there is a past that was perfect environmentally/sociologically/humanly/naturally. Like apocalypticists, proponents of this theory begin from the indisputable premise that life is far from perfect at present. They say there was a golden age that has been destroyed by modern life and we have to return there, which means ending the 'world' we are in now. This argument is easily found in all of Christianity (the Garden of Eden), the Enlightenment (cf. Jean-Jacques Rousseau's *Emile*), hippies ("We've got to get ourselves back to the garden" wrote Joni Mitchell in the song 'Woodstock'), and many others. In *Earthcare: Women and the Environment*, Professor of Environmental History Carolyn Merchant says, "The recovery plot is the long slow process of returning humans to the Garden of Eden through

labor in the earth," (Merchant 1). Merchant's message is that we have strayed far from Paradise and that the focus of our environmentalism should be on getting back there before it is too late. It is probably not necessary to believe in God and Genesis for this to be persuasive. As a concept and a persuasive metaphor, the imagery is persuasion enough.

As Keller points out, if the prediction of environmental apocalypse does not give rise to preventive action, it slides neatly into a despair very similar to Christian apocalypticism. "We wish for messianic solutions and end up doing nothing, for we get locked into a particularly apocalyptic either/or logic — if we can't save the world, then to hell with it." (14) This has its own political ramifications. Some of these were noted earlier, i.e. if the world is ending, then Judgement Day is coming soon, and let's accelerate it, because I am on the winning end. I must add the enthusiasm hopelessness creates for extremist politics: "Sociologists believe that a society that takes Doomsday predictions too seriously is in danger of responding in extreme and inappropriate ways." (Shaw 214) While much of this extremism is on the right, some of it is surely on the left. A fence crops up, and it is a familiar one. I can argue this till doomsday.

Conclusion

Science is popularly seen as truthful and authoritative, and scientists tend to be believed, even about the end of the world. Science as we know it has its roots in European Christian tradition, and is consequently closely allied with Christian

apocalypse. Simple enough. Things become more complicated when we consider how much of an influence apocalyptic assumptions, be they religious or political, have on scientists and their work.

When religion is the premise for scientific apocalypticism, the result is a familiar Endtimes scenario based in the Book of Revelation. In these cases, science legitimates a desirable and inspirational apocalypse. However, scientific apocalypse is more familiar to us in environmentalism, as a deterrent and a political tool, and when politics, science and apocalypse intersect, ideas get enmeshed in complicated ways.

The political argument with apocalypse as deterrent can be despairing or hopeful. The despair comes when apocalypse seems horrific and inevitable. The hope rises when it seems apocalypse can be prevented by us, if we act now. Thus John Leslie's risk based argument in *The End of the World* is also a call to action on the environment, war, and over-population. A whole branch of environmentalism is seeking action to return to a mythic paradise. The hope lies in recognizing that there are things to be done, and finally that we can do them.

CHAPTER 5

POPULAR SCIENCE

In Chapter Three, I selected a random sampling of the supermarket tabloid, the *Sun*, from 2001 and 2002. This was not purely random, as only issues where Armageddon was on the cover were selected, and there were periods when none were purchased at all. However, the selection can be called a good range of Armageddon predictions in the *Sun* for this period.

I have proposed that the 'endtimes' can be, and is, used ideologically. I showed that both endtimes predictions and science have strong Christian roots. Similarly, within their own cultural contexts, that is, among believers, Christianity and science are perceived as the most reliable sources of truth.

So — if the *Sun* (in our selection) draws on an overtly Biblical tradition of Armageddon prediction, what about the corresponding period in scientific literature? To step back, what would a scientific literature be that corresponds to the *Sun*? What kind of a magazine is the *Sun*, anyway?

It would be a mistake to call the *Sun* a Christian publication. It is aimed at people who will take Christian predictions seriously, but also offers other tangentially related spiritual ideas, usually if they are connected to Endtimes (Nostradamus, Kali yuga, Native American prophecies). Though experts are quoted on Biblical topics, these experts are not established theologians. The *Sun* could not be considered a peer reviewed journal of Christian ideas. Rather, it is a

place where interested readers can find out about exciting events in Christianity, science, politics and entertainment. There is clearly an assumption that sources, though listed, will not be seriously reviewed.

What is a possible scientific literature that could be considered parallel to the *Sun*? I think it is lay scientific publications, by which I mean magazines that are not the locus of peer reviewed publication, but rather journalism for interested lay persons. There are many of these, from *Sciences* to *Science Now*. In the way the *Sun* presumes Biblical belief, these magazines presume a belief in science. Turning to Armageddon, how often do lay science magazines predict the end of the world? What kind of predictions do they make?

Apocalypse in lay scientific magazines

It was my belief that investigation of lay scientific magazines for their apocalyptic content would reveal that there was a plethora of it. This, I proposed, would be because of the intellectual roots of the scientific method in a Christian culture. Further, I surmised that apocalyptic predictions in these magazines would be presented with the supposition that readers would not be checking data or conducting a review of findings. This is because of the particular assumptions attendant on science in Western culture — it is assumed that it is not open to interpretation, and therefore, non-scientist readers of articles that quote scientists do not subject them to interpretation. In short, I presumed that I would find that apocalypse was predicted frequently because of the intellectual biases of Western

science, and that this would serve as a factual justification for apocalypticism. A cursory survey of these magazines in 2001 and 2002 bears me out. When I began to look at these publications from the period under consideration (2001/2002), I found many articles about the end of the world. These ranged from discussion of climate change in *Canadian Geographic* to nuclear war in the *Bulletin of the Atomic Scientists*.

In *Canadian Geographic's* May/June 2002 issue, after you have read about grasshoppers, plankton and the damage trawlers are wreaking on deep-sea coral, you can find out about Francis Zwiers, one of Canada's leading climate futurists. Zwiers is a statistician internationally recognized for his work developing climate models, a technology that he says is fascinating and completely fallible. Zwiers is known for entering politics only unwillingly. However, he does predict drastic warming for Canada, and says it has consequences in many fields,

If you design a storm sewer to cope with the present climate, in a warmer world you might have to pay to repair that system every 25 years instead of every 50 years. That's just the economic impact, let alone all the other kinds: erosion caused by flooding, loss of life due to flooding, those kinds of things. (Lahey 88)

The March/April 2002 issue of the *Bulletin of the Atomic Scientists* (BAS) is of particular note because here the Board of Directors (who are all scientists) moves the minute hand of their 'Doomsday Clock' from nine to seven minutes to midnight. The time on this clock is moved forward or backward in response to international nuclear dangers. Midnight is world annihilation, a nuclear apocalypse. Since it was developed, immediately following World War II, the

image of this clock has served as a powerful symbol for peace movements around the globe, who use it as a graphic deterrent to initiate anti-nuclear action. The movement of the hands forward is a significant apocalyptic prediction by *BAS*.

These are only two of the many scientific apocalyptic articles that came out in popular/lay science magazines in 2001/2002. However, as I sat down to survey science magazines I was repeatedly drawn to one in particular — *Scientific American's* extensive (four essays) review/rebuttal of Bjørn Lomborg's *The Skeptical Environmentalist: Measuring the Real State of the World (TSE)*, in their January 2002 issue. The intersection of science writing and Armageddon is complex, and tied to the manipulation of both science and Armageddon for political ends. When I encountered the examination of *The Skeptical Environmentalist* in *Scientific American (SA)*, I realized that I could illuminate parts of this debate better than by surveying magazines.

Scientific American and The Skeptical Environmentalist

The debates in *SA's* review of *TSE* concern the intersection of two things — scientific methodology and apocalypse — and arguably also the use of this intersection for political motivational purposes. We have seen repeatedly that apocalypse can be a persuasive language of hope and change, and even of idealism. In that case, Lomborg has placed himself squarely in the opposite camp, a realist in the realist/idealist dichotomy. For me, though John Leslie was

sometimes emotionally draining to read, Lomborg was even harder to take. Ironically, insisting on saying no to the end of the world in this case puts Lomborg in a cynical tradition. He is against change, and against reducing risk, squarely on the side of business as usual. Focusing on the review of his book in *Scientific American* opens these points to scrutiny.

Briefly (which is difficult, considering its 515 pages and 2,930 endnotes), in *TSE* Lomborg's goal is to show that the 'real' state of the world is not as bad as we are regularly led to believe by environmentalist scientists and the media that believes them. He is a statistician, who applies the tools of his specialty to data on a range of issues: food, forests, energy, pollution, biodiversity, global warming, and the like. He says in his preface that "we should strive for a careful democratic check on the environmental debate, by knowing the real state of the world," and that he hopes that "this book will contribute to such an understanding." (Lomborg xx) The book is full of the accoutrements of science: endnotes, graphs, tables, and pie charts.

The reaction to Lomborg's book has been widespread, with a host of glowing reviews from politically conservative publications, and similarly abundant criticism from environmentalists. "... probably the most important book on the environment ever written." says *The Daily Telegraph*. "*The Skeptical Environmentalist* is a triumph," says *The Economist*. "It's a magnificent achievement," says *Washington Post Book World*. (Media and Reviews) But in a bookstore in Oxford, UK, a pie was thrown at Lomborg. There is an entire website (www.anti-lomborg.com) devoted to debunking his debunking. An

international group of scientists is urging Cambridge University Press to drop the book from its list (Goldstein 86), and the Rising Tide website cites him in their 'Hall of Shame,' a list of "journalists and academics who promote their careers by denying climate change." (Rising Tide) In response to a question about Lomborg at the World Summit on Sustainable Development, Christopher Flavin of the World Watch Institute said "Mr. Lomborg has been pretty well discredited in the scientific journals, and disavowed by his government here in Joburg, so I wouldn't take him too seriously." (Flavin "Discussion Archives")

Speaking to Andrew Goldstein of *Time* magazine, Lomborg said, "I'm making a fair amount of money from the book, a lot more than Cambridge [University Press] thought." (Goldstein) If nothing else, his arguments certainly sell. Goldstein proposes that it is actually the "name calling" around TSE that is doing the selling. Why is the conflict about this particular book so heated? Well, for one thing, Lomborg's book is hardly dispassionate. He sets things up as polemic against the environmental movement, so it is not surprising that the movement responds. The premise of Lomborg's entire venture is his critique of what he calls 'The Litany,' which he says is a dominant cant that the planet is dying. He says that, to the contrary, things are getting better. "Mankind's lot has actually improved in terms of practically every measurable indicator."

(Lomborg 4)

At the beginning of this chapter I proposed that this debate is about science and apocalyptic ideology, and how they are foregrounded in this article in *Scientific American*. In the following I look at these things more closely.

Science and the debate in *Scientific American*

Part of me wonders about Lomborg's free use of the word 'real,' but maybe I am being too hard on his use of language. His is not a philosophical treatise, after all. However, this word shows that Lomborg clearly has a lot of faith in the scientific method and its ability to uncover truth. He says that though he is not an expert in any of the sciences he examines, he is a statistical scientist, and therefore qualified to look at the statistical implications of data from any science. In *TSE*, he contends that science has been poorly applied to the issues he examines, and that he will now apply it correctly. Since he rests his entire thesis on this faith in scientific method, and his correct interpretation of it, he leaves himself open to close scrutiny by other scientists. Therefore, even if a critic agrees with Lomborg that the science he is examining is bad, Lomborg's science is what comes into question first. In *Scientific American* Lomborg's scientific practice is roundly criticized, and Editor in Chief John Rennie concludes that "in its purpose of describing the real state of the world, the book is a failure."

(*Scientific American* 61)

Harsh words.

Stephen Schneider, a biologist and a world authority on climate change, writes the first of *Scientific American's* four essays on Lomborg, a critique of

TSE's section on global warming. Schneider admits to frustration with the many uncertainties of the global warming issue, and to an initial eagerness to read Lomborg, in hopes that some things could be clarified. Instead, he was confounded by Lomborg's twinned conjecture and sloppy reasoning. He has very specific complaints to make about Lomborg's method. To paraphrase Schneider on Lomborg's book:

- there is no discussion of different kinds of statistical probabilities and outcomes (which one might reasonably hope for from a statistician)
- the vast majority of his citations are to secondary sources
- the only studies cited are those parts that agree with his premises (viz. that the world is getting healthier all the time)
- one extreme of a range (e.g. of temperature change, or of costs) is frequently accepted as fact without mentioning the rest of the range (62-63)

Schneider is frustrated by the huge number of endnotes in Lomborg's book (600 for the global warming chapter alone). Again, he notes that initially "That kind of deadweight of detail alone conjures at least the trappings of comprehensive and careful scholarship." (62) But after reviewing these endnotes carefully, he warns, "many lay people and policymakers won't see the reviews and could well be tricked into thinking thousands of citations and hundreds of pages constitute balanced scholarship." (65) "[B]eware of the myth busters and 'truth tellers,' " (65)

John P. Holdren is a US academic working in environmental policy, specializing in energy issues. In his task of reviewing a section of *TSE*, he had the opposite problem from Schneider — the chapter on energy is very short, and completely misfocused, says Holdren. In Lomborg's attack on the litany that

environmentalists promote, Holdren says he demonstrates a lack of knowledge of the literature, and attributes things to environmentalists that, says Holdren, have long been absent from mainstream environmentalism. "So whom is Lomborg so resoundingly refuting?" he asks. (65) Holdren, too, finds that Lomborg fails to define his terms, and cites figures that are wrong. Overall, he says, "his treatment is superficial, uneven, and marred by numerous errors and infelicities. For example, he persistently presents numbers to two- and three-figure precision for quantities that cannot be known to such accuracy." (67) "He makes claims, based on single citations and without elaboration, that are far from representative of the literature," and "He bungles terminology." (67) "Lomborg is giving skepticism — and statisticians — a bad name." (67)

Population researcher John Bongaarts writes on Lomborg and population, criticizing Lomborg for a selective use of statistics. He points out that Lomborg bases much of his argument about population growth on a serious and fundamental error (to be charitable) in calculating population density. "Unfortunately, the unrelenting we-are-doing-fine tone that pervades Lomborg's book encourages complacency rather than urgency," (69) concludes Bongaarts.

Finally, Thomas Lovejoy, an international authority on biodiversity, takes on *TSE* on that topic. He is no less scathing than other reviewers about Lomborg's science. In fact, he accuses Lomborg of sometimes ignoring scientific process altogether. Again, this would not sting so much if Lomborg didn't base his whole argument on being the lone environmentalist with good scientific

process. Lovejoy also says entire chapters are poorly researched and presented, that there is a dearth of citation from peer-reviewed literature, and that Lomborg misleads readers with selective information. Lovejoy sees a pattern of denial, selective quoting, and biased language. His checking of endnotes in the chapter he was responsible for reviewing sometimes led nowhere. "Sadly the author seems not to reciprocate the respect biologists have for statisticians." (70)

Since science is a method above all other things, methodology is the fundamental place to criticize someone's science. However, for most readers, who usually have little science beyond high school, this methodological dialogue is difficult to follow. Lomborg substantiates his critique with graphs, tables, charts and endnotes, all visually impressive. However, clearly non-scientist readers/reviewers who have called the book a triumph have not tried to track down the endnotes that Lovejoy in *Scientific American* calls "a mirage." (76) Lomborg obviously assumes that readers like Lovejoy will be the exception, and probably Lovejoy presumes the same about his *Scientific American* readers. Both are operating on the assumption that a scientific label will justify their arguments.

Ideology of apocalypse and the debate in *Scientific American*

We have seen that debate around *TSE* rests on two issues:

- first, methodology — as we saw earlier, Lomborg accuses scientists and environmentalists of poor methodology, and other scientists and environmentalists accuse Lomborg of the same thing;

- second, apocalypticism, which Lomborg says is too common among environmental scientists, while they say he is in denial about it.

Lomborg says his entire project is based in debunking *The Litany*. He finds possible apocalypse depressing and consequently distrusts what he sees as the fuzzy science of environmentalist apocalypticism. This is his impetus for writing his book, he says. As we have seen, however, Lomborg practices some pretty shaky science himself. It seems fairly evident that it is more apocalypse than outrage about methodology that is his impetus for *TSE*.

In fact, Lomborg's book shows such an evident and persistent anti-apocalyptic bias ("the unrelenting we-are-doing-fine tone" that Bongaarts refers to (69)), that it becomes clear that his real goals might be different from his stated ones. Why go to the trouble of producing such a voluminous tome with such prodigious back matter and not correct some of the egregious errors in it? The purpose is unlikely to be the advancement of science or Lomborg's vaunted democracy. Even if it turns out to be true that Lomborg is simply a questionably competent statistician, why is there such support for his book?

The answer could be in the second part of Bongaarts' quote, namely "Lomborg's book encourages complacency rather than urgency." Goldstein notes that "conservatives worldwide use its [*TSE's*] ideas to justify inaction on such issues as deforestation and global warming." (Goldstein 86) The debate in *Scientific American*, based on method, is also about science as it can be used to support apocalyptic and anti-apocalyptic ideologies. In this case, scientists working on environmental issues are invested in apocalypse. Bongaarts says it very clearly: Lomborg's vehement denial of any and all apocalyptic predictions

leads to complacency where there should be urgency. These scientists are very aware of the role science can play in changing behaviours in order to prevent apocalypse. They are willing to acknowledge the importance even of faulty science in this regard. Lovejoy points to Norman Myers' 1979 estimate that 40,000 species are being lost from the globe every year, and Lomborg's criticism of Myers. "There is some justification for this objection: Myers did not specify the method of arriving at his estimate. Nevertheless, he deserves credit for being the first to say that the number was large [emphasis mine] and for doing so at a time when it was difficult to make more accurate calculations." (70)

I posed a series of questions at the end of Chapter One, that can be asked of any apocalyptic prediction. I have seen how these are answered in terms of the predictions in the supermarket tabloid the *Sun*. How do they play out in the debate about *TSE*?

Lomborg denies apocalypse. He agrees with environmentalists that there are problems with some aspects of the state of the planet, but on the whole he believes that science can solve them, and that the human race is actually better off now than at any time in its history.

On the other hand, much of the contemporary scientific community (as represented in *Scientific American* and in other science publications) makes apocalyptic predictions. What kind of predictions are these?

- preventable apocalypse
- unwanted apocalypse
- imminent and sometimes with a specific timeline
- planetary

- in our case, the predictions are written, though many other media are used
- the target audience is educated consumers who believe in science
- political or social change seems to be the purpose
- people are convinced of scientific apocalypse by intellectual argument

Given this scientific environmental apocalypticism, it seems Lomborg might be right about The Litany. However, try as I might, I cannot escape the feeling that there is a hidden agenda in Lomborg's sunny demeanour. It just doesn't fit together. In my experience, the main reason someone takes on activists as dominant is that they find the activism threatening. As far as the 'real' state of the world goes, the truth is that governments and business (the people with power) are dragged kicking and screaming to the most threadbare environmental policies, and even then, they make sure they're not passed. Lomborg seems to be writing his own litany, one that turns its back on the apocalyptic hopefulness of environmentalism. Lomborg's argument against The Litany is as gut based as Lovejoy's defense of Myers: "We must take care of the problems, prioritize reasonably, but not worry unduly," he says. (Lomborg 351) Choosing not to worry might just be another example of Keller's retreat into private concerns, another expression of despair.

Conclusion

In the last chapter I investigated the links between science and apocalyptic prediction. In this chapter I examined some of the popular expressions of

scientific apocalypse. I chose to look at lay scientific magazines, as a parallel medium to the other popular apocalypticism I explored, the supermarket tabloid the *Sun*. I surmised that apocalypticism would figure frequently in these magazines, and it does.

However, the phenomenon of popular scientific apocalypse runs deeper than mere frequency. Like other apocalypticism, it is wrapped in questions of inevitability and hope, and because of the nature of most contemporary scientific apocalypticism, it is entwined with politics. I found that the best way to examine popular scientific apocalypticism was to focus on one article in particular, a review in a lay science magazine of a popular, and distinctly anti-apocalyptic, scientific book by Bjørn Lomborg.

The argument around Lomborg's book is based in concepts of scientific methodology. From here it brings forward an idea that has come up for me in previous chapters: the path from secular apocalypticism to hope is not denial of the end. Instead it is a willingness to see apocalypse as something that can and should be prevented. When Lomborg encourages us not to be apocalyptic, and not to worry, he could be trapped in Keller's "apocalyptic either/or logic" (14). More than those he criticizes, he might just be giving up.

CONCLUSION

I began this paper with the goal of uncovering the hope in apocalypse, and how this might be manifest in the popular media around me. I said that my aim was to show that apocalypticism is popular and hopeful, and that it appeals to the educated and uneducated alike. In the course of the search for these ideas, I encountered myriad doomsdays, and a thrilling range of interpretations of them. Yes, I had thought I would find that predictions of the end abound, but I was astounded to discover the depth and breadth of the field. I was amazed by the diversity of writing and belief about apocalypse. And yes, I did find hope. In the strangest places.

This is a good time to review what has been established.



To start, predictions of Armageddon are widespread in time and space, perhaps because of the universal finality of human death. In the Western world, the roots of these predictions lie in monotheism, and in “the arrow of time” set up by Judgement Day. For Christians, the definitive Armageddon text is the Book of Revelation, the last book of the New Testament. The Book of Revelation is a visionary account and open to interpretation and re-interpretation, which is frequent, as none of it proves definitive. Predictions of Armageddon can be

inspiring, hopeful, frightening, or all three, and can serve political and commercial as well as religious functions.

In Chapter One, I saw that apocalypticism can be hopeful, but that this hopefulness is also not monolithic. More simply, there have long been people who hope for the end, and also those who hope it will not happen. Religious apocalypse looks forward with hope to a meeting with God after universal destruction, but revolutionary apocalypse hopes for a societal apocalypse on earth. These different kinds of hope are tied to the questions I set out at the end of Chapter One, questions that can be asked of any apocalyptic prediction. Those who derive hope from apocalypse derive it based on the particular apocalypse they believe in.



Beginning right with the Book of Revelation, communication is the essential component of belief in Armageddon. John of Patmos wrote the Book of Revelation in response to a command from characters in his vision to “write.” Therefore, in examining Armageddon it is worthwhile to look at some of the places where it is written, and how. These writings include everything from faith based prediction to political rhetoric. I was particularly fascinated by the dramatic predictions in supermarket tabloids, where apocalypse is entertainment.

In Chapter Two, on apocalyptic writing, it became clear that in terms of hope, an important distinction among apocalypses (and hopes) is whether they

serve as an inspiration or a deterrent. Within these, inspiration can be universal and faith-related, or mundane and politically based.



Supermarket tabloids can be a fruitful window on North American popular culture and beliefs. They are most often characterized as unreliable publications, with poor journalism, for uneducated people. However, they use many of the same journalistic practices as mainstream publications, and their commercial success demonstrates through sales that they strike emotional chords with readers from a wide demographic. One of them — the *Sun* — predicts Armageddon frequently. What is the nature of this apocalypticism? What are its similarities to, and differences from, other apocalypticism?

In Chapter Three, I selected a random sampling of the *Sun*, from 2001 and 2002, and examined the Armageddon predictions. This closer study showed that in these predictions:

- Armageddon is imminent, inevitable, and desirable
- the Christian faithful might suffer but will ultimately triumph
- the foreign policy of the United States is enmeshed in Armageddon — battles will be fought in the continental United States, the war on terrorism is about endtimes, and so on

The *Sun* acknowledges that the planetary situation can be seen as dire. They use mostly Christian visionary predictions, but also print material from other religions, and different apocalyptic sources. They print scientific apocalypse

stories — about the environment usually, but also about asteroids. Like environmentalists, they frequently predict an apocalypse that is imminent. However, unlike environmentalist apocalyptic stories, none of these predictions talks about apocalypse as preventable. In the *Sun*, hope is an individual hope for a better life beyond.



Tabloids are considered unreliable. At the other end of the reliability spectrum is writing about science, an area that enjoys a great deal of respectability, and reputation for reliability. Common contemporary mainstream Armageddon predictions come from scientists, in the context of environmentalism. In Chapter Four, I looked at why scientists might be as trusted as they are, whether science might be necessarily apocalyptic, and the impact of apocalyptic assumptions on scientific work. I surveyed a variety of scientific apocalypticism, and focused on philosopher John Leslie's *The End of the World*. I found Leslie's risk based analysis draining, and hopeful. The hope here is in the idea that we can and should prevent apocalypse.

As I looked at scientific apocalypse, I saw that the locus of hope in scientific apocalypticism defined another distinction. For instance, if we compare the *Sun*'s apocalypticism to Leslie's, in the former, hope comes from individual faith in a desirable and inevitable life beyond, whereas for Leslie (in my interpretation) hope comes from being able to take action to prevent an

undesirable apocalypse and its aftermath. This is hope for a better life for the human race here.



In Chapter Five, I looked at lay scientific magazines from 2001 and 2002 in terms of their apocalyptic predictions. After a brief survey of other publications, I focused on one series of essays in *Scientific American*, where four scientists review *The Skeptical Environmentalist (TSE)* by Bjørn Lomborg. In that chapter it became even more clear that science, apocalypse and political ideology come together around environmentalism. Much of the focus of environmentalist science is apocalyptic, and the intense debate around *TSE* is largely about apocalypticism (environmentalists) or its denial (Lomborg).

With regards to hope in this debate, I suggested that the question might be whether we should worry or not. What do I mean? I mean the dictionary definition, that to worry is “to assail again and again until it is solved.” (*Concise Oxford Dictionary* 1485) I mean that Bjørn Lomborg’s anti-apocalyptic project is an elaborate and labour intensive way to tell people not to worry, and much of the criticism of it is to the effect that people should worry. By worrying, I mean seeing that apocalypse is imminent, unwanted, and preventable, and then worrying — seeing a need for concerted action to stop it.



To return to my goals.

Apocalypticism is popular. This is evidenced in its long and varied history, but apocalypse is not only about historical events. It is also a regular feature in a wide array of popular media: books, magazines, and tabloids. *Apocalypse appeals to the educated and uneducated alike.* There are many apocalypses, and many apocalyptic writings, each with its own audience. In this paper I focused on two of these: writing in tabloids, aimed at an uneducated audience (though I think it also has an educated readership); and scientific writing, aimed at educated people. Both are popular.

Finally, *apocalypse is hopeful.* Hope is the constant in apocalypticism. It can be an expression of a desire to be with God after the end, or it can be a symbol that things can change. Because apocalypse varies, the hopes it gives rise to vary too. They can come in conflict when the assumptions they are based on are in opposition. Thus, in the examples I looked at closely, apocalyptic hope in the *Sun*, which relies on inevitability, is in opposition to environmental apocalypticism, which relies on preventability and action. As in the example I cited of Secretary of the Interior James Watt, when these two hopes encounter each other, the result is at the very least friction.

Put another way, hope against hope.

APPENDIX

Performance: Looking forward to the Apocalypse

The project HOPE AGAINST HOPE: PERSPECTIVES ON APOCALYPTICISM is twofold, incorporating the paper *Hope Against Hope: Perspectives on Apocalypticism*, and the performance *Hope against Hope: Looking forward to the Apocalypse*. It is my intention that these two parts work as independent aspects of a whole. The paper is not about the performance, but neither is it required reading for the performance audience. Instead, the argument in each component is amplified by the other, and both are essential to the complete picture. They develop the same theme in different ways, one in essay format, and the other as dramatic arc, highlighting different things to the same end.

The processes of writing an essay and scripting a performance are similar, and unlike. The demands on the writer are different in each case, as are the demands on the audience. For one thing, reading a paper is a solitary activity with time under the control of the reader, whereas a performance is 'read' in a group, and is time-based at the direction of writer and performer. A paper builds a substantiated written argument. Performance is both verbal and non-verbal, by definition about sight and sound as much as words.

There is something else about performance, more difficult to define, having to do with the interaction between performer and audience. This interaction excites me, and it is why I perform. In 1998, in an article for the

Vancouver publication *transmissions*, I tried to write about it: “In a good performance, it’s almost palpable, the energy flying between performer and audience. It feels like the audience lets me say things for them. They’re right there, willing to go wherever the words lead, and they are also the director, determining where the words go. You do it together.” My job as writer and performer is that of a leader, or a shepherd, or a guide. The audience trusts me to take them somewhere, not to leave them hanging, and not to simply tell them how to think, either. This doesn’t always work, which is part of the tension.

There are, of course, many different kinds of performance. My work does not involve dance, and I do not sing. Because of my background as a writer, I am interested in words — reading, storytelling, and monologue. In addition, most of my performance has been as part of the group Kiss & Tell. We are visual artists and writers doing performance art, working with our own sculpture and photography, and collaborating with other artists, and musicians. This is the background that I bring to the construction of *Looking forward*.

HOPE AGAINST HOPE presents particular challenges. In the paper *Perspectives*, the task has been to bend an often emotional personal journey to a framework of intellectual argument. In the performance *Looking forward*, the challenge has been to frame the argument as an emotional journey for writer, performer and audience. The two pieces have been intimately connected from the outset. The idea for the project came out of performance, specifically a performance script, and tabloid visuals in that performance. As the project paper unfolded, there were discoveries that resonated with performance but did not fit

in the paper. At its best, I have been working with a ground of images and stories, choosing what goes where, and for what purpose.

Looking forward and *Perspectives* begin in the same place, with a piece called 'Radio Doom,' a look at apocalypticism as it manifests itself in my daily life. In the Introduction to the paper, I note the reaction I got to this script, and to my subsequent interest in doomsday predictions. The performance begins with this piece, and an exploration of the (often heated) debates it engendered in my performance group.

With these arguments established, the piece brings Revelation to the stage, with a possible Virgin Mary reading key passages. These passages are about apocalypse. More importantly, they are also powerfully imagistic. Revelation is a surreal visionary work, and these readings set the context for apocalypticism — based in Revelation and its otherworldly atmosphere.

Perspectives explores some of the many apocalyptic predictions in our culture, their various styles, and what their purposes might be, leading finally to written apocalypticism. In *Looking forward*, the questions raised at the end of Chapter One of *Perspectives* serve as the springboard to a survey of apocalypticism. The questions allow for direct quotation of apocalyptic literature, and to answers from the 'Virgin Mary' as well. This concludes with the piece 'Rapture,' written for me by Persimmon Blackbridge for the larger piece *Corpus Fugit*, first performed by Kiss & Tell in Vancouver in 2002. 'Rapture' is a first person monologue interpreting a possible kind of apocalyptic storytelling, and linking it to the popular apocalypticism of love and relationships.

This leads to the triologue 'Dreamer,' an exploration of the passionate conflict about hope at the root of debates around Bjørn Lomborg's book *The Skeptical Environmentalist*. Within this argument, the Virgin Mary returns, this time reading from tabloid newspapers.

Finally, *Looking forward* ends where *Perspectives* does, bringing together conflicting hopes.

Visually, I have chosen to set *Looking forward* in a school setting, to relate it better to the paper and to the project. I want to give primacy to words and ideas, and use visuals illustratively. I have chosen not to use slides or video in the backdrop, but rather overhead projectors. It is also here that tabloid images come to the fore, as the setting for the piece. Overall, the set is minimal, as formally uncomplicated as possible, and the tech is done from the stage.

To fill out the piece, I have involved others in the performance. On February 20, 2003, the following performers worked with me. Glen Watts is an accordion player, and added the right musical element, simultaneously haunting and funny. Like apocalypse sometimes. Persimmon Blackbridge and Vanessa Kwan performed the words I couldn't. Bill Hood prepared the soundscape that starts it all off.

Following is the working script for 'Radio Doom.' It has been modified in performance.

Radio Doom

Imagine this — a room
a bed
bedclothes
a woman.
Oh yes, and a clock.

It is summer. Through the curtains there is sunlight, an early morning kind. The woman is sleeping, like a log, like the innocents, like a baby. Above her deep and dreamless sleep the lightless stars go by.

The clock is sister to the stars. When the Pleiades line up with Orion's belt just so, when Betelgeuse has transited through Capricorn, when the Virgin and the Water-Bearer have tipped their hats, it is 8 o'clock. And at 8 o'clock is World Report. At 8 o'clock, heroes and political trials and bloody feuds and gossipy disasters swirl irrevocably into a funnel and are sucked into the clock. At 8 o'clock the clock gives the funnel back to the world.

So it is that she comes out of her sleep this summer morning at 8 o'clock as always —

"plagues pestilence earthquake flood tornado death disease.

The sky is falling the end is near repent sinner for the kingdom of heaven is at hand, you have been judged by the lord and found wanting."

The sleep was dreamless, a dreamless pool, now here the fish rise one by one and pierce the surface, spreading ring after ring —

“melanoma asthma autism allergies hives sores bleeding headaches mutants.”

She mumbles. The covers twist, the muted sun shines. The stars are still moving sightlessly. The clock talks and talks. The woman reaches blindly, shuts it up, sleeps again, diving as deep as she can.

This is a drug with its own habits. Ten minutes later, there we are again —

“Scientists say acid rain toxic waste global warming dead fish dead birds dead bears deserts.”

“If I can just jump in here,” says a panelist, “I’d like to tell a story about a frog in boiling water. You see, if a frog is dropped in boiling water, he’ll just jump out ”

The woman grumbles. She strikes, she swims in sleep, and the clock is silent and waits. Its turn will come again, in the fullness of digital circadian rhythms.

“I have to point out at this critical juncture that we are all worried about the situation. Jobs are at risk. Ten thousand hectares are at risk. I go out there and all I see are stumps stumps stumps stumps for days. A scenic fringe is not enough nor is it too much if we can work with the loggers and the animals and the environmentalists to negotiate more treaty settlements and elections and occupations.”

“Shut up,” she says to the clock, but the clock knows that these are just flirtatious words. The woman needs the clock. The clock is just getting warmed up.

“A car is on fire in the Westbound lane of the Trans-Canada Highway. More rain today. And vaccination clinics.”

“rock rifle tank bomb landmine cruise missile star wars A-bomb H-bomb
neutron germ AK-47 the guerrilla gun,” it starts again.

“water pollution air pollution noise pollution light pollution”

“Tell me how it was,” says the interviewer.

“The fruit tasted better then. Apples came in bushels and you rubbed them on
your shirt to shine them. Just to shine them, that was all.”

“We were eating pesticides.” says the woman to the clock. “Give me a break.”
She can always hit the clock and leave the surface, away from ripples and flurry.
She can always. She does always. The clock has the limitless patience of the
inanimate. It doesn’t even move under her hand, it goes quiet, carefully counts
the minutes. It has all day, which is more than the woman can say.

“freezing raining melting falling too dry too wet too cold too hot”

“Irradiated modified patented and opposed. Five years and at this rate twelve
herds and forty dog sleds slush mush slush.”

“Unprecedented global collapse

Too late, baby. Too late.”

The button settles slowly as it clicks off. Is always already up when it starts again.

“communism on the rise capitalism on the rise apathy on the rise
too rich too poor too many cars too many cigarettes too many photos too many
fast things too much too many too many too many calls and faxes and scans and
pictures and letters and cards”

“not enough letters and cards”

“too many feelings too many hopes too many fears too many confessionals”

“Tell me how it was to be a fish back then.”

“It was exactly like now except impending doom was different then. Friendlier, somehow and not nearly so violent. Slower, somehow. Not coming so fast. We were not afraid. We had nothing to fear but fear itself.”

Fear lives in the clock but does not affect it. Fear seeps out of the clock and infects everyone else. Fear is terrifying. That's its nature. Still the button goes down slowly and clicks. Still it comes up imperceptibly.

“We used to write all the time. We wrote in cafes and on buses and in airports and in bed. We wrote and wrote and wrote and then we tucked a trinket in — a joint, maybe, or a key. Things that don't travel on a phone line or even on a wide band server. That's how it was.”

“The right, fundamentalism, arms race, cruise missile, Y2K,, oil spills, no more cod, no more rainforest, no more food, AIDS, cancer, heart disease, floods, waves, drought, drugs, violence, bullies, illiteracy. Too many taxes, not enough rules, sloth and dirt and perversion and anti-Christian behaviour and always drugs, violence, bullies, illiteracy.”

A clock can run forever, if the circuits are right. If the circuits run forever, that is. A clock is not affected by what it says.

“Do you know that one about the people who are living underground and they look at that Coppertone box all the time because they have never seen the sun because it's too toxic and they would all die?”

“There is no end to it don’t even try,” says the woman at long last. “Just be quiet.”

Shameless, really, but the clock has the boundless obedience of a machine. It has sated the woman with fear and worry, and now it sits in the same place till tomorrow. When the stars are auspicious, it will rise again. Tomorrow at 8 o’clock.

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