The Cross: A Long Poem Using the Techniques of Numerical Composition

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Abstract

The Cross is a long poem with a numerologically determined structure. In my introduction I examine some of the ideas behind the tradition of literary numerological composition, particularly those presented in the Timaeus of Plato and in Augustine's De musica. I then scrutinize number's aptness as a unifying principle in the poem, briefly elucidating the Golden Proportion and showing its centrality to the poem's structure, concluding with a look at my use of number metaphor. The Cross, partly and wholly the embodiment of these theories, follows. Its subject matter is the history of Montreal. Each book has a unifying focus: Book I centres on Jacques Cartier's explorations in 1535; Book II on the activities of the fictional character Mrs. Chau, in the recent past; and Book III on the visit of the Prince of Wales in 1860 for the inauguration of the Victoria Bridge.

Résumé

La Croix est un long poème duquel la structure est déterminé par la numérologie. Dans mon introduction j'examine certaines des idées essentielles de la tradition de la composition littéraire numérologique, en particulier celles présentées dans le Timaeus de Platon et dans le De musica d'Augustin. J'étudie ensuite l'applicabilité du nombre comme principe d'unité dans le poème, en élucidant en peu de mots la proportion d'or, et en démontrant son importance à la structure du poème, en examinant finalement mon usage de la métaphore numérique. La Croix, qui réalise ces idées en tout et en partie, suit. Son sujet est l'histoire de Montreal. Chaque livre a un foyer unifiant: le premier traite des explorations de Jacques Cartier en 1535; le deuxième des activités du personnage fictif Mme. Chau, dans le passé récent; et le troisième de la visite du Prince de Galles en 1860 pour l'inauguration du Pont Victoria.

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The Divine Equation:
Figures in Literary Numerological Theory

Symmetry is omnipresent. The natural world is built upon symmetries of different kinds, as is the human body. Yet, while we take for granted the importance of numerical relationships to arts such as music or architecture, we tend to neglect their relevance to literature. This is a strange phenomenon--on the one hand because numerological composition was widely practised among the writers of classical antiquity, the Middle Ages, and the Renaissance, and on the other because it is an effective means of encoding symbolic information and expanding writing's resonances.

This is not to say that a reader need be acutely aware of proportion in a work for it to be effective. If the architecture of Renaissance Italy is beautiful, it is largely because of the arithmetic incorporated into its design by architects who believed that certain proportions were more harmonious than others. The viewer of the cathedral at Siena needs no knowledge of geometry to appreciate the building's beauty; nonetheless mathematical principles have been employed to increase its effectiveness as an aesthetic object. As in many texts of the same period, numbers here are not merely decorative, but serve to structure and give meaning to the whole.

In this introduction I will summarize some of the important ideas behind the uses of numerological theory by focussing on the Timaeus of Plato and on Augustine's De musica, two of antiquity's most influential works on the subject. Having established its theoretical basis I will examine my use of numerical structure and symbolism in The Cross.

Plato

While Plato was undoubtedly the most influential proponent of numerological theory in the west, the tradition did not begin with him. Rather, numerology was born when Pythagoras discovered that musical intervals could be expressed, like the movements of the stars, in terms of ratios. The Pythagoreans supplied the foundation for the more sophisticated speculations of Plato and those who came after him. Pythagoras himself, however, is known only through the reports of others, such as his hostile critic Aristotle. Nonetheless he seems to have been driven by his discovery of the mathematical ratios in musical harmonic relationships to embark on a search for objective standards of beauty: if music could be interpreted in terms of mathematics, then so could everything else. According to this model, qualitative differences in sense perception must depend on mathematics. Harmonics, the Pythagoreans believed, were the basic laws of the universe.

James Miller writes that "numbers in Pythagorean cosmology did not function as do numbers in modern astrophysics. Far from being purely analytical concepts formulated by the human mind they were eternal principles of world-harmony antedating the visible world and actively binding it together" (46). Numbers were invested with an awe-inspiring significance. Ten is traditionally the perfect Pythagorean number, representing Unity, due to its containment of the first four numbers. That is, 1 + 2 + 3 + 4 = 10. Moreover, these four numbers may be used to form the then newly-discovered ratios of all the perfect consonances: 2:1 (octave), 4:3 (fourth), and 3:2 (fifth). The Pythagoreans subsequently aligned the heavens with their mathematical notion of Unity by making the planetary bodies add up to ten--the sphere of the fixed stars, the five planets then known, the sun, the moon, the earth, and the "counter-earth," an ad hoc sphere whose invention understandably drew fire from Aristotle. The Pythagoreans were not above moulding phenomena to fit their preconceived cosmic notions.

From this school of thought also comes the idea of the "music of the spheres," supposedly produced by the continual movement of these large bodies through space, in much the same way a stick makes a sound when passed quickly through the air. The Pythagoreans asserted that this heavenly music could be heard by the astute listener, and that humans had

merely grown inured to it through constant exposure; with the right training anyone would be able to hear the divine harmonies. That the universe was then perceived animistically meant that all nature was akin, and that, if the spheres constituted a harmony, so too must the human soul. Contemplation of the cosmos, then, cultivated such harmony, and numerical relationships became the basis of both the cosmos and the soul. For the Pythagoreans all things were number in the most essential sense.

Plato makes use of the idea of the music of the spheres in the final section of the Republic, in which Er, a Pamphylian soldier recently returned from the dead, recounts his journey

> to a mysterious region between heaven and earth where the souls of the just were separated from those of the wicked, and there he had seen a curious mechanism which he called "the spindle of Necessity." This device consisted of a long adamant staff around which spun eight concentric whorls, each placed one inside another like a set of mixing bowls. The bottom of the staff rested on the knees of the goddess Necessity, who spun it to the musical accompaniment of her divine attendants. The whorls represented the planets and the fixed stars, and on the rotating rim of each sat a Siren who uttered a single note in

> perfect harmony with the notes of her sisters.... Seated on thrones outside the cosmic spindle were three other singers, the Fates, who accompanied the Sirens' song by chanting of the things that were and the things that are and the things that are to come.
>
> (X.616a-617b, paraphrased by Miller 38-39)

Plato also describes the widths of the whorls, as well as the velocities of the planets and their colours, which Robert S. Brumbaugh thinks indicates their density (186). If he is right, the planets in this model of the universe are all symmetrically paired in a system based on the number nine (the demonstration of which would take more space than I can afford). Interestingly the order of the planets Er describes does not follow the astronomical model of Plato's day, nor does Plato typically use nine as a governing numeric principle. Brumbaugh writes that "the use of nine as a central number breaks Plato's usual pattern of mythical arithmetical analogy; his numbers in myths and semimythical histories are elsewhere presented as terms of powers of ten" (194). Contrary to Pythagorean tradition, nine here underlies the structure of the universe. Nine, of course, has plenty of resonances of its own: it is the traditional number of the Muses, and of the then-visible spheres of the cosmos. In the Myth of Er there are eight spheres kept in motion by the central spindle, adding up to nine; there are

eight sirens who produce one harmony, giving the same total.

So much for legend. In the Timaeus the music of the spheres is never mentioned, although the dialogue seems continuous with the Myth of Er: the character Timaeus, probably modelled on the Pythagorean Timaeus of Locri Epizephyrii in southern Italy, delivers his lecture the day after Socrates tells the Myth, and in the conversation preceding the dialogue Socrates summarizes some of the previous day's arguments. The Timaeus is thus the "cosmological extension of the political and moral theories expounded in the Republic" (Miller 39). In it Plato posits that true morality is derived from the order and harmony of the soul, and that the human soul is the counterpart of the soul of the world, whose order and harmony are reflected in the order of the heavens. It is the first Greek account of divine creation, in which the Demiurge or Craftsman divides Chaos into the four elements and chooses the proportions of the World's Body by mathematical design. Significantly, mathematics in Plato's time was not cut off from the other natural sciences. Geometry and number were viewed as a promising new tool: the most essential, and therefore the ideal philosophical language. In classical Platonism enlightenment begins with the mastery of the arts of number.

But though Plato uses the Pythagorean tradition the dialogue makes no Pythagorean leaps of faith. Timaeus is

"more a physicist than a pure mathematician or mystic" (Miller 38). He has never heard the music of the spheres, and brings an innovation to the telling of cosmogonic legend by citing astronomical observation figures alongside mathematical theory. This is not to say that Plato was above inventing proportions or distances, but he did avoid twisting what was already known. Early in the dialogue, Timaeus states that Reason is the correct means of coming to know the "unchangeably real," and criticises the superstition attending on different approaches (28a). That this discourse follows the Myth of Er gives greater weight to the ideas it propounds. Plato thus distances himself from the more fantastic elements of the Pythagorean tradition while enthusiastically building upon its basic premises.

I will focus on those sections of the Timaeus that illustrate numeric theory. The first of these is the description of the Demiurge's creation of the Body of the World (31b-32c), a copy of the perfect and eternal Form. The world is composed of the four elements in fixed proportions to each other. While Empedocles (490-430 BC) had suggested the four were equally represented, Plato revises his theory in light of more recent findings and assigns the largest part to fire, since it mostly constitutes the heavenly bodies, and the smallest to earth. He posits that these could not be combined except by means

of geometrical proportion. Only a tightly interrelated series of numbers will lock together or "harmonize" physical bodies in the universe.

Interestingly the verb "harmozein" means "to join," in terms of stones or other material things, such as musical tones, which, as Pythagoras discovered, are similarly related by sequences of simple ratios. In the section of the Timaeus at hand, the Demiurge is faced with the task of joining fire to earth, and requires two mean terms to do so. These he finds in water and air. In mathematical terms their relationship might be likened to the series 1, 2, 4, 8, since with these

> whatever the three numbers, the middle one between any two that are either solids (cubes?) or squares is such that, as the first is to it, so is the middle to the first, then since the middle becomes first and last, and again the last and first become the middle, in that way all will necessarily come to play the same part towards one another, and by doing so they will all make a unity.

This is the definition of a continuous geometrical proportion with three terms, which can be neatly illustrated with the series 2, 4, 8: 2:4 = 4:8, and conversely 8:4 = 4:2 (Cornford 45). However three terms are not enough, since solids must be represented by solid numbers, which are

the products of three numbers: cubes, which symbolize the body in three dimensions. Squares are accordingly referred to as "plane" numbers. In any case one and eight are both cubes, and between them are the means two and four, interrelating as the four elements must to form a harmonious whole. Cosmic harmony depends upon the simple ratio.

The World Soul, on the other hand, is compounded of three constituents: intermediate kinds of Existence, Sameness, and Difference (35a). Each of these is a Platonic Form, distinct from the others, yet "all-pervading", in that every one of them "combines" with every other and with every Form there is. You can say truly of any Form whatsoever that 1) it <u>exists</u>, 2) it is the <u>same</u> as itself, and 3) it is <u>different</u> from any other Form (Cornford 61-62). Here the three are combined into a long strip marked off in divisions corresponding to the 1, 2, 4, 8 geometrical proportion discussed above, as well as to the series 1, 3, 9, 27:

> And having made a unity of the three, again he divided this whole into as many parts as was fitting, each part being a blend of Sameness, Difference, and Existence.
>
> And he began the division in this way. First he took one portion (1) from the whole, and next a portion (2) double of this; the third (3) half as much again as the second, and three times the

> first; the fourth (4) double the second; the fifth (9) three times the third; the sixth (8) eight times the first; and the seventh (27) twenty-seven times the first. (35b-c)

The passage produces this diagram:

1

2 3

4 9

8 27

This is called the Platonic Lambda, after the Greek letter that resembles it. Its seven integers, separated by six intervals, are linked to the physical universe in a number of ways. Seven, to begin with, represents the seven planets, the seven phases of the moon, and the head's seven orifices. According to John MacQueen, "Like the universe, the number 7 is self-generating and self-sustaining" (32). Self-generation is particularly evident in this series, because traditionally even numbers are feminine while the odd are masculine, and their interaction mirrors the procreative urge of the universe. The Lambda also represents all the universe's physical dimensions: one signifies the single point in space, two and three the line, four and nine the plane, eight and twenty-seven the solid. Plato stops at twenty-seven because it is the cube of the

first odd number (one's attributes are such that it falls into a category of its own) and contains all the other numbers in the series in that it is their sum. Musically, the progression represents an interval of four octaves and a major sixth, though Plato's choice of these numbers is not musically determined. Nonetheless he goes on to fill in the intervals between the numbers with the Pythagorean musical ratios discussed above, as well as the ratio 9:8, representing the single tone. Thus the Demiurge constructs a section of the diatonic scale. That there is no suggestion that the Pythagorean music of the spheres is audible to human ears, however, indicates that "in the Timaeus the harmony resides in the structure of the soul; it is not connected with audible tones whose pitch had been imagined as depending on the relative speeds of the planetary motions" (Cornford 72).

Plato goes on to describe the armillary sphere, a model of the heavenly bodies made of metal rings--Timaeus hints in 40c that the Academy possessed one--in which the distances between the planets correspond to the intervals between the numbers of the Platonic Lambda. Using simple ratios to describe these distances seemed reasonable since they could not at the time be established with sense data.

The last section of the Timaeus I will look at deals with the Demiurge's creation of the regular solids, the definite patterns of shape and number given to the elements

existing in a disorganized state in Chaos (47e ff.). The pure potential of undifferentiated space must now be contracted into volume, and this is most perfectly accomplished with those forms that have all edges and all interior angles equal, the five Platonic solids: the tetrahedron, octahedron, cube, dodecahedron, and icosahedron. These are constructed from isoceles and scalene triangles, the most elementary planes because they are defined by only three points. Water, air, and fire are composed of scalene triangles because they can be transformed into one another given the right chemical reaction. Earth, on the other hand, is composed of the isoceles triangle. The cube is associated with earth, the tetrahedron with fire, the octahedron with air, and the icosahedron with water. This leaves the dodecahedron, which poses somewhat of a problem since its pentagonal faces cannot be constructed out of either of Plato's basic triangles; consequently it is not constructed, but used by the Demiurge "for the whole" (55c), since it most nearly approaches the sphere in volume. Cornford suggests that "here Plato imagines a flexible dodecahedron expanding into spherical shape" (219), much like a soccer ball.

In any case the building blocks of the world are all formed by immutable geometric law, conforming as nearly as possible to Plato's concept of mathematical perfection. Number, distinct from the changeable reality perceived by

the senses, becomes the immutable structure underlying all things. In the Myth of Er, Plato employs legend to depict a universe imbued with numerological significance. In the Timaeus, on the other hand, he presents a visible universe built on a metaphysical framework of mathematical proportion.

Augustine

Plato's was not the only early numerological system, however. The Hebrew tradition of literary numerological form existed alongside it, as is shown by the recurrence of certain symbolic numbers and the use of numeric structure in the Old Testament. The two traditions were not effectively merged, however, until the time of Augustine, whose City of God, for example, imitates the book of Revelation in its twenty-two book structure. Augustine was also a major proponent of numerological exegesis--by no means universally accepted in his day--as a means of allegorical interpretation: he states in De doctrina Christiana that "An ignorance of numbers ... causes many things expressed figuratively and mystically in the Scriptures to be misunderstood" (2.25).

De musica amply demonstrates the centrality of the numerological concepts of both the Platonic and Hebrew traditions to Augustine's thought, since this early treatise contains the seeds of many of the concepts that would be

more fully developed in his later and better-known works. He began it before his baptism in Milan in 387, writing its last book in Africa in 391. One of a series of treatises on liberal arts Augustine began and never finished, De musica consists of six books, themselves only a fragment of a larger treatise on music. He apparently intended to write six more books on Melody (de melo)--that is, a treatise on Harmonics--whereas De musica pertains "only to that part called Rhythm" (Taliaferro 153). Though the Timaeus furnished many of its basic premises, Augustine was more directly influenced by the work of a Greek named Aristides Quintilianus, likely of the second century AD, whose treatise is the only one to come down to us complete from the Greeks or the Romans. Augustine, like Aristides, deals with music's theological and cosmological aspects in his final book, in which number and proportion become the basis for ordering the soul--much as in the Timaeus.

Early in Book I Augustine defines music. He believes the term derives from "the Muses," and uses it to describe the science, distinct from grammar, of "mensurating well": "ars bene modulandi" (1.2). W. F. Jackson Knight translates this as "how to make controlled variations of sound in the right way" (11). Modulandi derives from modus, or measure, and thus denotes measuring, limiting, or controlling.

Augustine explains the idea of mensuration further.

This term involves "a certain skill in moving"--"scientia bene movendi"; when nothing moves, things cannot be out of measure, and likewise a thing only moves well when it keeps its measure (1.3). The dynamism of the universe depends on movement, and its order and beauty depend upon the correct mathematical measure of those movements.

Augustine goes from this discussion into the numerical measurement of movements: "I believe," says the master to the student, "that all measure and limit is preferred to infinity and immeasurableness" (1.15). This echoes the Timaeus (33b), in which the Demiurge "judged uniformity to be immeasurably better than its opposite," thus providing the foundation for Augustine's mathematical thinking. The unlimited and unmeasurable are, in Augustine's view, irrational. As a result he tends to equate reason with mathematical ratios; what can be reduced to ratios is by definition reasonable, and in his treatise he deliberately obscures the distinction between the two meanings of the Latin ratio, which means both ratio and "reason." It comes as no surprise that "Augustine has accepted as consistent with his Christian beliefs the Pythagorean doctrine that number underlies all things" (Pahlka 20).

Numbers are a divine institution, unlike language, which depends for its meanings on tradition and is related to reality only arbitrarily. In De musica Augustine repeatedly attacks grammarians, who, he claims, dogmatically

maintain that syllables have the fixed lengths they did in the classical quantitative metric, by then in its death throes. This passage from De doctrina Christiana illustrates the debate:

> It is perfectly clear to the most stupid person that the science of numbers was not instituted by men, but rather investigated and discovered. Virgil did not wish to have the first syllable of Italia short, as the ancients pronounced it, and it was made long [according to the grammarians' conventions]. But no one could in this fashion because of his personal desire arrange matters so that three threes are not nine.... Whether they are considered in themselves or applied to the laws of figures, or of sound, or of some other motion, numbers have immutable rules not instituted by men but discovered through the sagacity of the more ingenious. (2.56)

The limit and measure of numbers connect them with each other. Those which are multiples of, or commenurable with, one, are rational; those which are not are irrational. In counting, as in tragedy, there must be a beginning, middle, and end; that three is the first number to embody these properties makes it the first whole number. One and two, on the other hand, are both beginnings; thus "it is the first beginning from which (a quo), but the second through which

(per quod), all numbers are found to be" (1.21). The two beginnings added together make the first whole and perfect number. There is a "great harmony" in the first three numbers; no other set of numbers possesses a similar relation. "Three has the further distinction of being the only number in which two numerals which, in counting, occur contiguously add up to form the numeral which, in counting, comes next after them (1, 2, 3; 1 + 2 = 3)" (Knight 16). Augustine, in the Pythagorean tradition, regards such relations as sublime.

Four is naturally the next topic of discussion. Its merit lies in the fact that it is both the sum of one and three and the product of two times two. It is also the first even number. Most importantly, however, the means of the sequence one through four equal the sum of its extremes: 1 + 4 = 2 + 3. Equality, for Augustine, is always superior to inequality.

Augustine justifies ten's status as a basic unit just as the Pythagoreans did, in order to make it the upper limit for the number of feet in a line of verse. His purpose in discussing numeric relationships at this point in the discourse is to relate them to meter, which he proceeds to do toward the end of Book I. Proper ratios of movements, he claims, belong to the science of mensurating well, and cause pleasure--as, for example, in the rhythmic beating of a gong in iambs. What is essential is that the beats not be of

long duration, but of the lengths occurring in song and dance. When the beats are short and regular it is possible to perceive their proportions and enjoy their rhythmical quality--numerositas, or "numberliness." What is beautiful is what is numberly.

Much of the first five books of De musica is devoted to giving "rational" explanations for even the most eccentric features of traditional versification, and to showing how every metrical rule is based on ratio and proportion, and the numbers one, two, three, four, and ten. He defines prosodic terms using these concepts as well: meter, for example, is a combination of feet equal in length, with the same ratio of parts. A never-ending combination, or "rolling forward" of feet is rhythm (numerus), whereas a combination with a fixed number of feet, which then starts over again, is meter. A meter cannot have less than two feet, or four times.

Verse, claims Augustine, exists where there is a ratio of division in meter; meters divisible by two delight the ear more than those which cannot be so divided. Thus verse should be partitioned in two similar, but not convertible, parts, in accordance with Augustine's high regard for equality.

Augustine's interest in meter is naturally connected with his belief in the divinity of number. William H. Pahlka explains that

> meter has a surprisingly privileged place in Augustine's philosophy. In ontological terms, it participates in divine Being; cosmologically, the structure of meter is a perfect analogue to the principle of creation itself, the divine Logos; in the realm of psychology, meter touches the soul quite directly, since the soul itself is founded on number and rhythm.... finally, meter's metaphysical role, as an imitation, is to mediate between human words and the divine Word. (16-17)

For Augustine, then, no discussion of meter can be far removed from a discussion of the divine.

This is particularly evident when Augustine moves from corporeal to incorporeal subject matter in the sixth book. According to Robert Catesby Taliaferro, this part of the work is "a bold development of the traditional Platonic phrase stemming from Xenocrates: ... 'The soul is a self-moving number'" (378 n. 23). Augustine begins by pointing out that numbers received by the soul, from God, are better than those received by the body (in the music hall, for example). The soul naturally delights in higher things, which are defined as those "where the highest unchangeable undisturbed eternal equality resides" (6.29). The analogy to the Pythagorean habit of contemplating the cosmos in order to perceive its underlying numeric structure is clear. In Augustine the yearning after equality among

numbers and metrical feet is shown to be a microcosm of the higher yearnings of the soul; hence the first five books. Though the equality of syllables in the quantitative metric of the grammarians may be subject to temporal laws, the equalities Augustine discovers in meter via ratio are eternal, and thus belong to the realm of higher things.

For Augustine, all "sensibles"--including sights, smells, tastes, and tactile sensations--"please us from equality or likeness." Moreover, "where equality and likeness, there numberliness [numerositas]" (6.38). Indeed, beautiful things please by number, because they reflect the eternal, unchangeable substratum of all creation.

Because meter, and thus verse, are divine, it is through verse that language, a human institution, can penetrate beyond the material. Proportion exists apart from its embodiment in passing sounds, and it is on this, not on quantity, that the beauty of verse depends. Thus for Augustine no verse can be beautiful unless it imitates the underlying form of creation.

Applications

Clearly the numerological tradition supports more than an ornamental use of number in literature. Numerological composition allows the structure of a work to serve as a metaphor or an allusion, building meaning into the framework that precedes the words. In numerologically structured

writing language resonates with form. Form need not merely mirror content; it can contradict, comment ironically, constitute an alternative content simultaneously outside of and within the text. Its use is key to maximizing poetry's evocative potential.

Unity

Nonetheless I would have difficulty justifying a slavish adherence to the ideas of antiquity. Thus in The Cross I use number as I need it, and not in accordance with any particular system. Every piece of writing requires a principle of organisation, and since I want the form of the poem to resonate with its content (though not necessarily to reflect it), I have drawn on systems invented to express ideas like the ones central to The Cross. That is, The Cross looks at the similarities in dissimilar things, and strives for Unity. The symbol itself represents the meeting point of disparate tendencies, the dynamic crux producing the energy that moves the universe. As Blake put it, "Without Contraries is no progression." Through the mediation of the cross, or of crossing, the Contraries are "harmonised". The cross is a mathematical symbol; through it the poet may join the incommensurable by mathematical means.

The Cross's subject matter is wide-ranging and its voices various. This is merely a reflection of human

experience. On the one hand, no one experiences their world as if it were spoken consistently by the same person in the same mood; instead it is perceived as a spectrum of difference. On the other hand, no one has a single voice. Rather, each individual is a chorus of voices radiating from an inscrutable centre. To try to isolate a single authoritative voice is to impose false unity on what is naturally rich and varied.

For this reason I looked for poetic unity outside what is normally thought of as form. While metre has often been used in poetry as a unifying principle, to use the same metre throughout The Cross would have inevitably obscured the clarity of the voices I wished to speak through it. Just as the pulse corresponds to different emotional states, metre reflects different moods. I use poetic devices to "imitate" in the Augustinian sense, though this imitation resonates most in the tension between the prose meaning of the language and the musicality that poetry permits. Through the intersection of these properties of language the poem may speak most clearly as a harmony of individual voices.

Of course, the poem takes place mostly in Montreal, or more specifically the area radiating out from the cross on Mount Royal. This provides a kind of unity of subject matter. Yet Montreal, like any city, is a diverse environment. While my point of view is ethnocentric, as my

preoccupation with the European phase of the region's history shows, I have tried to avoid generalisations and to view the city as a collection of facts. Mrs. Chau, for example, is not an archetype, but the voice best suited to express what it expresses. Given the diversity of experience in the city, however, and my wish to avoid privileging any group (which after all would conflict with the Augustinian principle of proportion), The Cross cannot be told from the point of view of any particular faction.

Similarly it cannot be told "chronologically", since linear history itself is no more than a culture-bound motif. Cartier's sailing the St. Lawrence centuries ago may have been one of the events that created the world we know, but strictly speaking has no reality now except as narrative. I am not claiming that "history is bunk"; rather that the only time that exists is the present, and history is no more than an aspect thereof. Typically I might pick up my book about the Pont Victoria between drinking a glass of water and flicking through stations on the radio; accordingly I have not allowed chronology to give a spurious order to the diverse facts that constitute "history". Linear time is too often used as a unifying principle. Links between one event and another are more profitably sought elsewhere.

It follows that the "historical" facts I use in The Cross sometimes appear out of order. Otherwise I have tried to be as historically accurate as possible: twisting reports

of the past can no more be justified than the Pythagoreans' invention of the counter-earth. There is no border between fiction and non-fiction: everything written is a fact in a continuous narrative. Therefore it is possible to invent circumstances not described by historical accounts without compromising the narrative's integrity, because the invention serves merely to fill a gap in the known. Just as one history book contains information another doesn't, the poem contains events set in historical contexts that will not be found in the historical record. And just as one historical account can cast doubt on another, the poem, if I had not been careful to get the facts straight, might on some level be discredited; there would be a disharmony between the historical sources and the poem. Since one text is always liable to be cross-checked against another, clearly all are parts of the same text. The Cross seeks to be consistent with the other chapters in that text.

Thus back to my use of number as a harmonising principle. Hopefully my introduction will have demonstrated how helpful mathematics can be in increasing an art object's impact; in the last few paragraphs I have tried to show how a number of other approaches to poetic unity would conflict with my aims. Here I will briefly examine how I have built the universe of The Cross on a numerological framework, attempting to "mensurate well" without sacrificing the internal variety the subject demands.

The Golden Proportion

Centuries ago it was not unheard of to count syllables or letters to arrive at a kind of numerological coherence far beyond anything I have attempted here. The smallest unit I have counted is the line; this, however, made it impossible to incorporate prose. I have only considered syllables where I wanted to produce a certain rhythm, or internal symmetry.

The mathematical concept that governs the structure of the poem is the Golden Proportion, also called the Golden Section or Mean. By paraphrasing Robert Lawlor's Sacred Geometry (44-58) I will explain as much of the lore associated with the Golden Proportion as is necessary to understand my use of it in The Cross.

To understand the Golden Proportion one must first understand the ratio. A ratio, according to Lawlor, is a comparison of two different sizes, quantities, qualities, or ideas; hence all conceptual judgment is based on ratios. A proportion is the relationship of equivalency between two ratios: for example, "a is to b as c is to d", which using mathematical notation is written thus: a:b::c:d. The Greeks called this relationship analogia.

For a proportion to be strictly analogous, however, its extremes must be bound together by a mean term. This is a proportion with only three terms, a "continuous proportion": for example, a:b::b:c. Naturally this sort of proportion

more nearly approximates a sense of unity than the four-term or "discontinuous" proportion. There is, however, one three-term proportion that approximates unity more nearly still. This is the proportional division possible with only two terms, written a:b::b:(a+b): the Golden Proportion.

The Golden Proportion tends most often to be represented as an equation: (root 5 + 1) ÷ 2, or the irrational number 1.6180339... It is also found in the Fibonacci Series, which begins 1, 1, 2, 3, 5, 8, 13, 21, 34, 55. Here each number is the sum of the two that precede it. Dividing one of the figures by the one before it produces a number that approaches the Golden Proportion:

5 ÷ 3 = 1.666...

8 ÷ 5 = 1.6

13 ÷ 8 = 1.625

21 ÷ 13 = 1.6153846...

This relation will be found in any additive series.

Note also that the product of the division of five and three is more than the Golden Proportion, while eight divided by five is less, and so on. Thus if we take the Golden Proportion to symbolise perfection or Unity, this section of the Fibonacci Series represents a spiralling from imperfection toward perfection. (When the series is followed beyond this section the spiral will eventually begin to move away from the irrational root, then back again, and so on ad infinitum.)

Geometrically, the Fibonacci Series can be used to draw a logarithmic spiral like that found in the nautilus shell, associated with Shiva in Hindu mythology. I should point out that spiral movement is particularly appropriate to a poem in which characters periodically travel up a mountain by paths that may be seen to represent sections of a spiral. In any case, the Fibonacci Series crops up in phenomena as diverse as the distribution of leaves around a stem, the breeding patterns of rabbits, the ratio of males to females in honey bee hives, and the multiple reflections of light through mirrors. All of this helps justify my use of the Golden Proportion and the Fibonacci Series as the basis for the structure of The Cross. In it I imitate the natural world to lend resonance to an artificial construction.

Structure

I chose ten for the number of books because ten is the perfect Pythagorean number, and because the digits of ten added together make one, a Unity; ten is also represented by a cross in Roman numerals. (I have so far completed the first three books, which follow.) The projected poem represents simultaneously a spiralling toward and away from perfection, because to arrive at the number of lines for each book I multiplied the first number of the Fibonacci Series with the tenth, the second with the ninth, and so on. This did not produce a figure I could use as a book length,

however; a book of fifty-five or thirty-four lines was not long enough for my purposes. Thus I needed another figure by which to multiply. If I had multiplied in each case by the same number the books would have ended up being too different in length, undesirable because inequality is inferior to equality and compromises unity. (At the same time I did not want the books to be all the same length, for fear of a loss of dynamism.) Consequently I chose three appropriately symbolic numbers to multiply by: seven, nine, and ten, all of which I have discussed above. Thus the plan for the number of lines in each book of The Cross looks like this:

Book I: $1 \times 55 \times 7 = 385$

Book II: $1 \times 34 \times 10 = 340$

Book III: $2 \times 21 \times 9 = 378$

Book IV: $3 \times 13 \times 10 = 390$

Book V: $5 \times 8 \times 9 = 360$

Book VI: $8 \times 5 \times 9 = 360$

Book VII: $13 \times 3 \times 10 = 390$

Book VIII: $21 \times 2 \times 9 = 378$

Book IX: $34 \times 1 \times 10 = 340$

Book X: $55 \times 1 \times 7 = 385$

Note also that the digits of the number of lines in each case add up to either three, seven, or nine.

This plans gives each book in the first half of the poem its mirror image in the second half, providing

opportunities for balancing content in a similar manner. This is a chiastic structure, achieved through a mathematical operation represented by a type of cross. Moreover, it allows the poem to move simultaneously toward and away from perfection, reflecting its concern with facts divorced from any chronological context. This implies that any of the periods the poem touches on contains the conflicting tendencies that create dynamism. The Cross posits no Golden Age, merely presenting complementary situations that help illuminate each other.

The Golden Proportion was also used among the authors of antiquity to create appealing proportions within a written work. The easiest way of dividing a number into two parts according to this principle is to multiply the number by 0.61803: for example, 55 x 0.61803 = 33.99165. The product is, of course, very nearly the number preceding fifty-five in the Fibonacci Series. Thus the golden section of fifty-five is 34:21.

The golden section of The Cross falls at line seventy-seven of Book VII. I have also worked out the golden sections for each book and for each part of each book (the books being divided into seven, nine, or ten parts, according to the above plan). My approach is not as rigorous as that of many authors in the past in that I have not bothered to look for the golden section in smaller units, such as the line. But I view it as a means of

highlighting an idea or of drawing attention to an aspect of an issue; thus in the first two books important lines or groups of lines fall at the golden section. (I abandoned this approach in Book III, where other structural devices are at work.) In this way the golden proportion not only provides the poem with a structure but also helps arrange ideas within the structure.

Metaphor

It follows that the content of the poem should reflect the mathematical ideas that structure it to achieve a unity of form and subject. If the cross of the title represents both the cross Cartier erected on the Gaspè and the one de Maisonneuve planted on Mount Royal, as well as its modern-day counterpart, then clearly a theme of the poem is the imposition of this sort of geometrical form upon a land where it was previously unknown. The square--embodiment of the number four, which symbolises the finite, rational world of procreated form (Lawlor 44)--recurs frequently as a motif, as in Mrs. Chau's dream in II.iii, or in the view of the city in II.x. The image of the straight line tends to appear wherever materialistic pragmatism becomes a focus. The circle, representing unmanifested spirituality and creative potential, occurs, for example, to counterpoint Cartier's linear perspective in I.ii, and in Ramusio's plan of Hochelaga in I.vii. The beacons atop Place Ville Marie

describe the geometric properties of the physical world at the beginning of Book I, forming the point, the line, the plane, and finally the solid, to bring the poem into the manifested world of oppositions.

Book I

i

As day fades
the four beacons spin
a bright silver cross
at the top of the tower[1]

each seeking its point in darkness

from the lens clearing
its straight path in night

spinning beams fusing
arc with shining arc
a bright plane in darkness

high on the tower turning
the sphere beneath spinning
this short night four beacons fuse
darkness in light

At the centre
perfect stillness
At the centre
perfect silence

Round the earth's axis
the storm's eye
the wheel's hub

Round the centre of the turntable
the music plays
(the music spins me round and around
and around and around and around)
singing the song of the spiral grooves
(around and around and around)
to the centre the needle moves
(around and around and around)
tracing each line to its conclusion
each song to its end

poised in each etched groove
between what has been
and what is to come

poised in each etched groove
from beginning to end

Even in the silent groove
there is music

The record hisses

The wheels turn
The storm roars
The universe spins

The needle moves
toward the centre
but never reaches the centre

The record plays
till the record ends
but the record
never ends

At the centre
perfect harmony
At the centre
perfect silence

If the needle could play the centre
what sound would it make?

ii

A bright October morning in 1535
two children of the village of Hochelaga
are running through a golden field of corn

In 1492
Columbus sailed the ocean blue
looking for gold
and silver too

With the rope he trims the sail
that pulls him to the garden of the new world
Yet it is Isabella's gold
that gets the credit

How does the proud man
Conceive of worlds he has never seen?
How does the unlearned man
Return with new knowledge to an old world?

The ship has stood for commerce
since a shadow passed over the sea's face
and the sea saw
for the first time
something new:

the first ship
hewn from the pines of Pelion[2]
(sea, whirl your pointed pines
splash your great pines)[3]
the bronze heroes
leaving behind the point of origin
to rock beyond the cradle
past the sloping borders of the universe
outward round the endless curve
that leads home

escaping the clashing rocks
and the liquid spiral
of whose depths no one living speaks

making unknown known
to grasp the world
to seize the fleece
and bring it back

Thus of the new
the sea knew only the shadow

But Columbus
if what you found was new
why did you call Indians

people who had never heard of India?

With the rope he ties the knot
that binds him to the past and future
A golden chain will drag him back
To dig up the garden

Columbus with his teenage crew
four times sailed the ocean blue
He found the world was bigger round
and rounder than he knew

Now the children in the cornfield
hear a thousand shouts of joy
and run today like everyday
to see something new

iii

All hail to them![4]
The swarthy and bronzed men of the sea
those mariners from St. Malo
in three ships sailing the mighty river
into the bowels of the unknown continent

Oh yes, say Dom Agaya and Taignogny
(kidnapped by Cartier on his first trip)
Yes, of course
we've been here before;
this is the great river
that leads to Hochelaga
the only route to the west
that further up becomes fresh
and is so long no one
has ever reached its source.

The only passage to the west?
We'll see about that.
Men, head for the north shore!
(The great sails flap and crack
as the ship goes back on its wake)
We'll see if there's a way to China
somewhere around here.

On a map of Jacques Cartier's second voyage
this decision makes for a dotted line
that loops the loop in the gulf of St. Lawrence
then carries on up the river.

The children among the tall green stalks
strain to see the sun above the leaves
to find their way

Arrogant bastard
we've got a few things to tell the folks back home
about your stinking France.

The Savages Dom Agaya and Taignoagny
Dispute the Merits of Captain Cartier
in Rhyming Couplets:

T: How dear to me would be the sight
of Captain Cartier reft of light
From all his ill-got honours flung
Turned to that dirt, from whence he sprung.[5]
D: Yet surely, brother, you cannot boast
of having had a better host
I can think of no more marvelous thing
than to cross a sea to meet a king
T: My all-too-trusting friend, I think

Your's brain's decayed from France's stink.
What ruder people have you met
or so on violent conquest set?

D: And yet the riches of their land
are vaster far than ours, more grand
the twinklings of their trinkets fair--
why not in those riches share?

T: If sharing were the Captain's dream
why round him do weapons gleam?
I tell you we'll regret the day
that Cartier landed at Gaspé.

iv

Or Honguedo, as it had already been named, where
the captain raised his first cross on
which was a shield with three fleurs-de-lys and
an inscription that read VIVE LE ROY DE FRANCE; it
(the cross) was thirty feet tall--which
upset the chief who happened to be there because he
perceived (correctly) that by planting the
cross Cartier was actually claiming a
huge territory for THE KING OF FRANCE; of
course he told the chief it was just a marker to
let him know where he was the
next time he dropped
by.

honneste homme Jacques Cartier,
Cappitaine pour le Roy nostre Sire;[6]
Jackes Carter pylot of St. mallowes,
a man of honestie and muche estemed of here
in ffrance where he dothe frequente and occupie.[7]

Here is coming Captain Cartier
Sailing up the blue St. Lawrence
On a Saturday afternoon[8]

the leaves of its banks changing
from green to red to gold

The cross marks the point
between destruction and creation
beckoning round the curve
to add
to multiply

Oh, where in France's gardens fair
Had shone such colours, rich and rare?[9]

Our boats draw into a lake
And five men greet us
like old friends
One carries me through the water
as if I were as light
as a child

Where in France's gardens fair
Had shone such colours, rich and rare?

from the banks of the river
the people in their boats come
bringing us fish and corn

Where in France's gardens fair
Had shone such colours, rich and rare?

Amid the green and red and gold
they dance in rings
and light a hundred fires of welcome

Where in France's gardens fair
Had shone such colours, rich and rare?

A thousand welcome us at the shore
As warmly as any father
has ever greeted his child
bringing us great quantities of fish
and throwing so much bread into our boats
that it seems bread is raining
from the sky

v

The captain and his men get out of their boat
and follow their hosts down a forest path

Between the tall green stalks
the children run silently

The thirty-odd men tramp the well-trodden way
Awed by the beauty of a thousand oaks

The field whispers
the children hear it above their heartbeats

The men's feet trample a carpet of acorns
they look up to the sun on the oakleaves above

The corn grows from the dark earth
the children crouch and listen

Cartier's men take the path up the mountainside
thinking the forest as fine as any in France

Glad voices drop through the corn
the children run to find the path

Cartier and his men emerge into the sun
to view the expanse spread thirty leagues round:
land as fine as the eye could hope to see,
and the river stretching as far as the horizon.

"Blest hill of promise, by thy name
Of 'Royal Mountain' rise to fame!"[10]

Now one of their guides, who
happens not to speak
French, notices the
silver chain on the captain's
whistle, as well as the gilt
handle of someone's
dagger, and through
signs gets across that you can get
both silver and gold up the
Ottawa river, except that the people who
live up that way are armed to
the teeth, bad
people, 'Agojuda', always at
war, but when the
Captain hears all this he
thinks, great, it
's as if he
read my

mind

On the way down the mountain
some of our party are tired
and our guides carry them on their shoulders
just as if they were children

bronze hero
far from the harbour of St. Malo
enclosing each new sight
within your universe
soon to navigate the shrinking sea
from this compass point to that
a straight path home:

through this forest of a thousand oaks
you were carried
like a child

vi

In the beginning was the Word
and the Word was with God
and the Word was God[11]

So says our Captain in the village square,
making a cross with his hand in the air

And the light shineth in darkness
and the darkness comprehended it not[12]

Now bring the village to Cartier their sick,
hoping his good words might just do the trick

That was the true light
which lighteth every man that cometh into the world[13]

Then look the listeners to the sky with devotion,
Aping astutely each sign and each motion

And Pilate wrote a title, and put it
on the cross. And the writing was,
JESUS OF NAZARETH THE KING OF THE JEWS.[14]

But Cartier the soldier knows the act is no use,

And searches his prayerbook for a convenient excuse

Now in the place where he was crucified
there was a garden
and in the garden a new sepulchre
wherein was never man yet laid[15]

Thus ending his sermon he looks at the throng,
And hands out the trinkets he bought for a song.

When Cartier was through,
the old Chief in his language began to speak,
motioning feebly with his withered limbs:

I thank you for your good words
and for sharing with us your faith
the beginning and the end of everything.

Touch these feeble arms and legs:
weak and crippled
I am strong;[16]
only in weakness
is strength perfect.

Trials breed patience[17]

and patience is its own reward.[18]

Touch these feeble arms and legs:
my body is of this world,
and like everything in it
must decay

to release my spirit to the stars
to pass with them to the horizon
into the forests
the flower
and the fruit[19]

Now the women bring fish and soups and bread
not seasoned to the taste of the Frenchmen
who retreat with haste to their boats
Now the men follow by land and water
as mistrust carries Cartier and his men
downstream

Farewell to Hochelaga now!
The waters ripple at their prow;
The hundred fires pass from sight;
And soon their boats are wrapped in night.[20]

vii

Where is Burnside Street?

From an Archaeologist's Notebook:
--17 April 1948--rain
--excavation for new gas station--Burnside & Mansfield
--Trench I--north wall (to old foundations--east)
--potsherds--approx. 1/3 with dec. rims
--Trench II--nothing
--Trench III--exc. for tanks (sw corner)
--hardpan down 36"--clay
--pipe stem--Layer B
--construction to continue Mon.
--progress slow--rain constant[21]

around the Indian village press
the dark clouds of forgetfulness[22]
its past awash
in the present

Sound the knell for Hochelaga
For its history is behind it[23]
hush the knell for Hochelaga[24]
for behind it is its history

But where has Burnside gone?

Though the location of Hochelaga
can only be guessed at
tradition places it in the block
bordered, approximately, by Metcalfe to the west,
Mansfield to the east,
Sherbrooke to the north,
and Burnside to the south.

Burnside?

Ramusio's Plan of Hochelaga of 1556
shows a town with 10 streets
and 50 houses 50 paces long
laid out in perfect rectangles
contained within a perfect circle.[25]
Even the cornfields are rectangular;
though some doubt the Hochelagans
would have seen an advantage
in growing their corn this way.

You of many angles
Boulevard de Maisonneuve[26]
reflect yourself endlessly
in banks of granite and glass

your steel and concrete digging
from heaven to clay
through sand

How does the archaeologist
build the past from the present?
How does the modern person
return to the old world from the new?

Who can tell, Hochelaga
of your fires burning in the night?

Beacons like the four that spin
on the dark tower
the white cross fading
as night lifts

Book II

i

The new buildings that rise on the rubble
in flocks, to the langorous clouds,
will stand all night in their stories of light
swinging a searchlight to fear
(from "Demolition" by Louis Dudek)

Bam
that rise on the rubble in
Boom
flocks to the langorous clouds will
Bang
stand all night in their stories of
Bam
light swinging
Boom
Boom

Vroom vroom
langorous all night fear clouds
swinging rubble buildings flocks stand
will newrise stories tofear
onthe cloudswinging torubblenight
riseonall standbuildfearlightings

thatinrubbleto storiesaswing

vroom Vroom

swithintolangfearildallflocks

fearonligringwillaThiglewise

rubbleockawanginganigtho

rubble rubble

Vroom

Vroom

over dark pavement

cars rush

like thunder

headlights like drops

falling endlessly

ii

The Dream of the Architect:

The beams rise to heaven
over the earth
by the light that builds
at the world's edge
and sets to work
the crane that lifts
the concrete from earth
to sky

casting a shadow

Above the tower
the mountain dreams the city
the city
the mountain

Here comes Mrs. Chau
of apartment 2017
headed for the elevator
that will take her to the parking lot.

She gets into her son's car

a 1970 Mercury Cougar
red with a black stripe
shining mag wheels
black bucket seats
and ELIMINATOR in block letters
on each side, near the tail lights.

Her hands on the wheel
she revs the engine
drowning her pulse in its rhythms.
The nerves in her shoulders knot
as she climbs the ramp to the street
and she screws her face into a squint
as sun pours through the windshield.[1]

She turns on the radio
and flicks from station to station:

iii

toria et Jacques Cartier aux dernières nouvelles ça all

cette voiture absolument fantastique sur laquelle j'aim
nment Canada says a high of 26 tomorrow yeah golf weath

caverne de Platon enchaîné devant le mur de l'opinion

which is to say that this wall was a television screen

demain du soleil avec des passages nuageux maximum de perspeciale anche su matterassi come ad esempio la mar

it shake it baby shake it shake it shake it baby shake

She snaps the radio off
pulls over, parks
gets out, sits on a bench
and dreams a poem:

In a squat city centre a squat city square
rectangle brick blocks rectangle of air
black straight streets and a wall walling in
a green grove grating on a steel and tin din
brick blocks blackened and bleakened with smoke
for gridded in ingrates a grinning green joke
droppers by stomping in litter and shit
puffing on burnt butts and stopping to spit
griping and groaning unsettled unset
guessing grimly here grows all the green they can get

Waking, she notices
a butterfly on a rock.
She returns to the car
and flicks on the radio:

ee billion dollar Hydro complex on the Ste. Marguerite

ire la loi de proximité n'est plus la loi de proximité
can save you money Canadian Tire has guaranteed prices

um de 26 degrés alors demain c'est journée shorts Mario

down to 12 overnight then tomorrow some fog patches in

onsultez le Journal de Montréal le Journal du Québec et le TGV ou l'avion supersonique ou d'un moyen de transmi

move it move it move it baby move it move it move it ba

iv

The Song of the Mosquito
Hitting the Windshield:

From the cool swamp
I have flown
one of grey multitudes
I flap my colourless wings
with hunger

In warm pink flesh
I have found nourishment
over black pavement
I flap my listless wings
with thirst

To this barren place
I have flown
where all is darkness

I fall endlessly

The Song of the Butterfly
Hitting the Windshield:

From the warm cocoon
I have flown
uniquely magnificent
I flutter my bright wings
with thirst

In the cool red rose
I have found nourishment
Above glaring concrete
I flutter my tired wings
with hunger

To this desert
I have flown
where all is light

I fall endlessly

(Splat)
(Splat)

v

Mrs. Chau takes the ramp
that leads onto the autoroute
and remembers the dream
she woke from that morning

She dreams she is
in the passenger seat
of her son's car
next to her son
who is driving.
But he is drunk
always letting the car drift
into the left-hand lane.
She yells at him:
Keep to the right!
If you don't
we'll both be killed!
He smiles at her
And lets the car drift left again
and to her surprise
the oncoming cars flow round them
going so slowly
she can lean out the window
and talk to friends.

Then she sees the autoroute is so new
the yellow and white lines
have not been painted
and no one knows
which side to drive on
or takes for granted
that drifting left
means death.

Mrs. Chau drives down the exit ramp
and stops to buy flowers
yellow and white daisies
laying them on the black seat

vi

The Song of the Daisies in the Passenger Seat
of Mrs. Chau's Son's 1970 Mercury Cougar:

We once grew in a meadow fair,
and frolicked in the breeze,
our faces bright with yellow and white
the creator's eye to please.
We knew not what the future held,
nor worried much to know,
for in those days it seemed enough
in a meadow fair to grow.

We remember how with labour long
we grew each from a seed,
drawing goodness from the soil
our vegetable thirst to feed;
how our anxious roots dug down
to water fresh below;
our petals bright gazed at the sun
and gloried in his glow.

Then one day came woe's harbingers
with scythes of sharpest steel,
who with one quick and fearsome blow

our sorry fate did seal.
No more would we the spring breeze know,
nor the sky's blue dome;
no more for us the good black earth,
the soil that was our home.

So plucked from joy, to sorrow cast
we perish on this seat;
the sun, who gave us life and warmth
now kills us with his heat.
To the grave's cold grace we speed
never again to know
the glory of the life we lived
in our meadow long ago.

vii

Mrs. Chau dreams she is a child
playing on the floor
of the house where she grew up.
Her mother picks her up
and looks into her face.

The house was somewhere here
where the green Hydro-Quebec tower
rises from the earth
humming with words
in different tongues

From here
the directive goes out
in lines that tie
rolling land
into the future

Straight lines tied
to sharp points
jab current through ice
and run the earth

Rolling the black road

lights burn the dark
to deepen the lake
behind the dam

Water roars
through turbines
spun to light
on green rocks

Here
light cascades
from jade-green glass
behind the figure
and the cars roar

This landscape is nothing like
what Mrs. Chau remembers

viii

Mrs. Chau, looking for a parking spot,
turns on the radio:

Boom boom
Thump thump
Shake it shake it baby
Shake it shake it baby
thump Thump
boom Boom
show it show it baby
show it show it baby
boom boom
Thump Thump
Shake your body baby
Shake your body baby
thump thump
Boom Boom
shake it shake it now
shake it shake it now
boom boom boom boom
thump thump thump thump
boom boom boom boom
thump thump thump thump
boom boom boom boom

boom boom boom boom
boom boom boom boom
boom.

Mrs. Chau turns down the volume
and puts her hand to her heart.

Boom. Boom. Boom. Boom.

Amid the towering walls
of the Centre Guy Favreau[2]
she sits at a white plastic table
looking into the faces
of old friends

ix

She parks the car
in the Mount Royal parking lot
and walks up the dirt road
toward the lookout.

What Mrs. Chau Sees
On Her Way to the Mount Royal Lookout:

Richard D's Ice Cream Bar
El Chileno Vin Blanc--White Wine
styrofoam cup
Dunkin' Donuts
Labatt 50
Craven "A" King Size
25 Filter Tipped Cigarettes
Minute Maid
24% de plus
Molson Dry
Trident Trident Trident Trident
Fresh 'n Tasty Grape Drink
surgilube (R) NDC 0168-0205-45
surgical lubricant
sterile
bacteriostatic

NET WT .3 g

Player's PAPIERS A CIGARETTES

IMPERMEABLE

100 FEUILLES

MAYA

BOTTLED AT THE SOURCE

NATURAL SPRING WATER

sock

MOLSON

EXPORT

BIERE . BEER

S.V.P. RESPECTEZ LES PLANTATIONS

x

Mrs. Chau sits on a bench
and watches night fall
on the city's towers.

She closes her eyes.

Through the sound of cars
a green wind blows
across her face
into the woods
where no sound follows

Toward the stars
above green earth squares
yellow light squares
rise in rows

Headlights and bright red lights
in straight lines
go at green lights
and stop at red

Streetlights splash light
on clouds and streets

that pass into shadow
and follow the river
beyond sight

A line of lights
flows over the bridge
like drops
falling endlessly

Atop stories of light
the searchlights spin
an eternal circle

Above the towers
the mountain dreams the city
the city
the mountain

Book III

i

Her Majesty,
unable to come herself,
would depute her eldest son and heir
to witness those noble advancements in a land,
from barbarism
to civilisation.[1]

Thus by telegram the date was fixed; he
should arrive by steamer, August 1860.
Now on the shore his subjects from near and far are
Thronged to catch him landing at the harbour.
"D'you see him yet? For God's sake give me the
glasses!"
(The crowd's delight all reason quite surpasses)
"The world will hear of this!" "Yes, won't they all
Envy the untold genius of Montreal,
home to the world's greatest bridge! In whose opinion
Will not seem glorious our new Dominion?"
All fall silent for a second; a shiver
thrills the crowd when ships appear downriver.
Then cannon roar! The church bells ring! The crowd
cheers with all its might--was there ever one as loud?
Then steps the Prince from his ship to the welcome

pavilion
of twelve towering pillars, all white and gold-
vermilion
bedecked with mottoes and hung with flags Venetian;
the names "Victoria" and "Albert" complete the
harbourside accretion.
(Then more applause and numerous speeches, which rather
than diparage
I'll skip this bit, and get the Prince straight into
his carriage.)
Note that along the route of the procession
(through which the teenage prince oozed self-
possession)
are nine gates, built by commission or subscription.
The first is Roman; now of the others a description:
The second is "floral"--a trellis with flowers;
The third medieval, with pennons and towers.
The fourth, Italian, says "Welcome--Bienvenue";
The fifth, on St. Catherine, is very fine too
with its mottoes and flags, its style mock-Moorish;
the sixth gives to Wellington a much-needed flourish.
Where McGill's twelve pillars (with two clocks) stand
today
Its boys built their own gate to brighten the way
The ninth, on the Main, has great Gothic arches--
But lo! Through this arch the Prince never marches

but heads for the Simpson Street gate--a fine sight! For here sleeps the Prince! So to the Prince a good night.

ii

sun

train clanks
CN Rail cars
long line moving

black rusted girder trellis
steel triangles
steel rectangles
steel crosses
(1898 not original)
strung power lines

rubber spins on metal

a car
a note
change pitch
fade
a car
a note
blend with last note
change pitch
fade

red and black bird
sings in a tree

broken brick
on man-made riverbank
thorny weeds
bumble bee
grass
yellow and black striped beetle

railroad tie shadow on wire net
wood and tar smell

helicopter hanging

car shadows move
this way that side
this way that side
car shadows climb
from water up stone piers

each gaily coloured car a flower
that fades as suddenly as it appear'd

train clanks

train clanks

train clanks

sun

iii

Now as the careful reader will recall
we left our Prince at home on Simpson Street
Where, in Mr. Rose's spacious hall
He paces the new green carpet of his suite
that with princely feathers and his motto is replete
so that anyone who saw him through the royal casement
could tell you what the look upon his royal face meant.

For what through those fine windows should he spy
but the city spread below alive with light:
Bengal lights and rockets fill the sky
over steamers in the harbour lit up bright
while in the streets gas jets and lanterns banish
night.
"D'you think," asks the Prince of the Duke of
Newcastle,
"I could perhaps take a look--without creating a
hassle?"

But it matters little what thinks the worthy Duke
The Prince of Wales is sure to have his way:
For before he's had time to think of a rebuke
his charge is in a coach amid the fray,
en route to Place d'Armes, where the lights turn night

to day--
when a policeman stops them, with the reproach
it is forbidden to tour the lighted streets by coach.

The coachman bends to tell the worthy constable
the coach he drives contains His Royal Highness
and only in this light will he be culpable
of sightseeing *plus* a coach instead of *minus*.
The policeman puts his thumb upon his sinus
and tells him to head back up Notre Dame--
in short, to take his coach back whence it came.

But someone in the crowd has overheard
the coach conceals the offspring of the Queen
and turning to the crowd he gives the word
to seize the coach and guide the Royal Teen
about the town to see what's to be seen.
The coachman, hearing this, at once takes fright
and turning round the coach at once takes flight.

No doubt the lesson that this story teaches
is that the Prince of Wales, when on vacation
should open bridges, attend banquets and make speeches
and do his best to move the crowd to admiration--
not try to move among them, and thus beneath his
station;

be content to light up a metropolis

and not attempt to bask in it on top of this.

iv ("A Princely Welcome", by C. P. R. Leprohangster)

THE ARRIVAL

Welcome, heir of England, to our land,
Where mighty forests countless squirrels shelter
Behold the hand that Nature fair has dealt her
While by thy royal side our people stand;
Behold her sparkling snowy mantle--how grand!
Or, since this is August, summer's swelter
That turns our emerald verdure to a smelter:
Whose flame by ardent love for thee is fann'd!
For thee and for thy gracious Royal Mother
Our woods and glens put on their brightest bloom!
For thee our land shakes off the torpor of the tomb!
For thee, the Prince of Wales, but for no other!
May the good will of our land His Highness smother
And its hearts throb forth in a resounding boom!

CHORUS OF SOLDIERS: On the Prince of Wales' coming
Sound the Royal Salute!
Set the war drums drumming
And the war-trumpets toot!

CHORUS OF YOUNG GIRLS: Gather roses and myrtle
And sweet eglantine!
Weave them into a girdle

For a royal valentine!

CHORUS OF SQUIRRELS: For a woodland observance
Of our Royal Guest's trip
May all nut-fond rodents
Their fluffy tails flip!

THE DEPARTURE

Farewell, oh noble son of our illustrious Queen,
Too soon we find thy visit at an end;
May you in safety o'er the fierce Atlantic wend,
Thy head fill'd with the strange sights thou hast seen:
Our cities: pretty, prosperous and quite clean;
The weather, which thy visit did befriend;
With thee these thoughts to Albion we send
Held in thy heart, where some less worthy thing had been!
Throughout our youthful land our youthful blood
Surges in a tumult of emotion!
Maidens, soldiers, rodents vow their devotion
And flush their ardour to thee in a flood!
Of England's Royal Tree, Thou Royal Bud!
Farewell, and take God with thee on the ocean!

V

I am the red and black bird who sings in a tree:
I have watched the diver descend in the torrent
alone in the river's force and mystery
knocked from his feet by the violent current
as he checks the dam is sealed to the riverbed
and makes sure the river will not rush in;
I have watched the workers pump the dam dry
to expose to air and sun the stone
hid lifetimes beneath the furious rush;
and now I watch them lay the stone
hard on the stone bed, surrounding firm
a place that has swirled and eddied
from eternity.

The men and women descend
to the river floor below the glistening surface,[3]
flecked with white like rushing clouds,
to the shadowed pit with tables sumptuously laid
with food and wine enough for a sultan's feast.
They fill their glasses while the river pours fast
around the dam's walls, and drink them dry,
closing in themselves the rich outpouring
of the reddened casks. Surely life on earth
can be excused only by setting restraint adrift,

and inhabiting the shores of pleasure.
The violins' song swims up from the deep,
and the revellers think the bird sings for them
as its throat pours forth its full note
like rain from swollen clouds. The lover
fills his glass to overflowing, and hears
his beloved's voice in their melodies,
yearning to drink the music of the full red lips,
a thirst overwhelming him with a river's force,
hot cheeks now wet with tears of yearning
as a drowning man yearns for the shore.
The lover drinks his glass dry, his tears flowing
like a river, boiling up to fill the hollow
with his love's turbulent rush.

I am the red and black bird who sings in a tree:
I have watched the diver descend in the torrent,
alone in the river's force and mystery.

vi

15 December 1859

A quarter inch of boiler plate between time and
    eternity
I press against the iron of the tube's side
as its first train inches by inches before me.
In this darkness, like that of an Egyptian tomb,
the void heart of the Eighth Wonder of the World,
filling with three times an engine's steam and smoke,
that obscures a lamp's light two feet away,
I wait to mark how much the tube will give:[4]
the cars pull stone, how many tons,
enough to make me fear how I would fare
in this close space if the test went wrong:
those quarried tons of lifeless freight
crushing breath from one foolish enough
to look for answers in a darkness
not meant for the living.
In the mountains
the rockslide doesn't know its victims.
Is this how we mimic nature,
by finding unnatural death in the natural force
of the crush of steam?

The engines halt. Over the quiet in the tube
I hear the river surge below:
the crush of ice against the pointed piers,
the crackle of it passing under, uniting again
in the push downstream. This sooty tube--
suspended empty space that makes a world wonder--
harnesses all the force of civilisation
to pull these stones from one bank to another,
inch by inch, inching into feet,
(Queen Victoria: How many feet is it,
from shore to shore?
Mr. Cartier: When we Canadians build a bridge
and dedicate it to Your Majesty,
we measure it, not in feet, but in miles!)
feet, running to miles, to deliver the message:
"Canada's boast, the largest bridge in the world."
Perhaps it takes a bridge of such prodigious size
thus to shrink time and space to a trifle
and speed the freight of progress to eternity:
these tons of stone, this quarter inch
of boiler plate.

vii

WANTED FOR THE BALL' TO BE GIVEN
IN HONOR OF H.R.H. THE PRINCE OF WALES
100 WAITERS

Apply to: A. Gianelli
"Cosmopolitan Hotel",
From 8 to 9 A.M.

Look, dear, look! The Prince is leading the quad-
rille--
No, over there--under the sign of Aries--
hold on to your blanket, or you'll catch a chill--

Yes, Aries, you see, on the ceiling next to Pisces--
the fishes--oh, but the dance is moving that way.
If only you could dance, like the other ladies--

For you surely look as well. --I should say!
--Hello, Mr. Crawford. --Good evening madam,
Miss MacLennan--will you and your aunts stay

For a while? I hope you're enjoying the programme--
--Oh, very much--I'm so glad to have the chance to come
and watch the dancing. --Well! But I must join them

now, I'm afraid--I've promised someone
the next dance. I'll drop up after and see
if you're still here. Goodbye! --You look quite
overcome,

My dear! He's very handsome, I'll agree,
But don't upset yourself. Look down there!
The girl in green--how it must feel to be

the Prince's partner! And the tiara in her hair--
how lovely! Here, dear, use the glasses--
It won't do for a lady to stare.

Get a good look at his face as he passes--
the whole room's moving with him. See how well
he knows the steps! Surely he outclasses

Any other gentleman here. What'll you tell
your mother when you get home?
(She thinks she might
describe the music, or the dancers--the swell

of couples--how many thousands!--the perfumed night,
ablaze with blushing faces, the grand round hall--)

--Where is Mr. Crawford? He said he'd say goodnight.

--I can't seem to see him, dear--perhaps he's left the
ball--
I'll look and see if he's dancing still.
--Please don't bother, really--it doesn't matter at
all.

--Then shall we go, dear? You look ill
And we've seen the Prince, now, which is why we came--
And as for the dances--well, they're all the same.

viii[b]

The Workmen of the Victoria Bridge
Address His Royal Highness:

The noble structure which Your Royal Highness has inaugurated has been to many of us the scene of our daily toil; and whilst carrying out the gigantic conception of the designer we have been able fully to estimate the difficulties which he had to contend with and overcome; and, now that he has passed away from this sphere of existence, we feel proud that we possess in these Her Majesty's Canadian dominions so magnificent a funeral monument of one who rose from our own class

His Royal Highness Replies:

I accept with peculiar pleasure an Address of artizans and working-men who have, by the sweat of their brow and the skilled labour of many a hard day's toil, contributed to erect this monument to the greatness of their country--a structure scarcely less honorable to the hands which executed than to the minds which conceived it. I mourn with you the loss of Robert Stephenson

son of the engineer of the first train, drawn in his wake to build this bridge, among others, but to die before its first train crossed it, amid a controversy that was to pull co-designer Alexander Ross to his grave shortly thereafter.
It is worth mentioning, too, that in all twenty-six men were killed during the construction of the bridge, most of these by drowning; perhaps it was their heightened consciousness of mortality that moved the workers to propose a monument to the six thousand dead of ship fever buried near the approach to the bridge: the monument, a rought thirty-ton stone, was "ERECTED BY THE WORKMEN OF MESSRS. PETO, BRASSEY, AND BETTS"--the contractors--as it says to this day, perched on a narrow strip of grass between the coming and going lanes of Bridge Road. When I went there, it had recently been decorated with several large wreaths. It's a short walk from there to the bridge, but with all the roads and traffic and the fact that the bridge is made for trains and cars rather than individuals makes it hard to get to--
but most importantly
it survives.

ix An Elegy

Weep not for the Prince! He is not dead,
his soul unclaimed by the bridge he gave his mother's
name;
his visit, merely, is at an end, the dancing's
finished, the darkened length
of airborn tunnel has received the regal blessing.
It is time to stop the wanton flow of wine:
let every creature cease its fulsome praise,
and snuff the lights lit in his honour--
the procession has passed through the gates, and now
may fade the flowers of its wreaths.

Begin then, with melodious tears
to weep, not for the Prince
but for his shadow--passed like day
from these shores round the spinning globe;
weep, river, that brings all lovely things
too briefly into view, to vanish
like tears of dew from morning flowers;
weep not for him who's spent his whirling youth
to don a King's robes at the end of life
and name an age that flutters by
like petals on the wind.
Weep, far-flung hills and woodlands,

shamrock, thistle, rose; but weep not
for the king who no more rules our groves
or for an empire greater than has been;
for nothing's lost that's lost, and empires'
resolve revolves like day, dissolving
to shadow shadowed over when the dusk
slips into night.

In the dark
the wheels turn
each car passing
like a note

in the sunlight
the wheels spin
each note fading
like a flower

weep not:
this is the gate not passed through
timeless threshold of silence opening
on the revolving light that like a star
beacons the eternal

Notes

Book I:

1 That is, the Place Ville Marie, a cruciform skyscraper dating from 1962.

2 See the opening speech of Euripides' Medea.

3 H. D.'s "Oread".

4 Atherton's Montreal 1535-1914, I.1.1.

5 Jonathan Swift's "A Satirical Elegy on the Death of a Late Famous General", ll. 31-32.

6 A snippet from the Archives communales de Saint-Malo; see Biggar's Collection, 82.

7 This snippet comes from the Public Record Office, State Papers, Domestic, Henry VIII; or more simply from the page facing the previous snippet.

8 Ll. 95-97 of John Glassco's Montreal, except that he thought it was a *Sunday* afternoon. I, however, am certain it was a Saturday.

9 From Walter Norton Evans' "Cartier and Hochelaga", 6.

10 Ibid., 15.

11 Supposedly the prayerbook Cartier had with him contained only the first fourteen verses of the first chapter of John (Biggar, Voyages 165, n. 72). This is John 1.1.

12 John 1.5.

13 John 1.9.

14 Cartier also read to the Hochelagans about the Passion, from John 18 and 19 (Biggar, Voyages 166, n. 75). This is John 19.19.

15 John 19.41.

16 Cf. II Corinthians 12.10.

17 Cf. Romans 5.3.

18 Attributed to Augustine.

19 The Hochelagans' conception of the afterlife as reported by Cartier (Biggar Voyages 179).

20 Evans 16.

21 See Pendergast, 162-64.

22 Evans 16.

23 Glassco, ll. 58-59.

24 A. M. Klein's "Montreal" supplied the word "hush"; the line sounds best if you pronounce Hochelaga as in French, making the ch an sh sound and putting the stress on the final syllable.

25 Pendergast 9-14.

26 The former Burnside Street.

Book II

1 Cf. E. J. Pratt's "The Man and the Machine".

2 A large development built not long ago on what was once part of Montreal's Chinatown.

Book III

1 Qtd. in Triggs, 75.

2 Though the Canadas were not confederated at this point the term "dominion" was already in use, and the Prince's visit did much to increase its popularity.

3 A party was thrown inside a coffer dam on the bed of the river to celebrate the laying of the first stone on July 22, 1854 (Triggs 57).

4 Charles Legge, an engineer who worked on the Victoria Bridge, gives an account in his book A Glance at the Victoria Bridge and the Men who Built It (62) of the test described here, conducted to ensure the tubes were safe before opening them to traffic.

5 The ball was held in an elaborate temporary pavilion with a round central ballroom 215 feet in diameter. The ceiling was divided into twelve sections, decorated with (among other things) the signs of the zodiac (Triggs 87-89).

6 The speeches may be found in Morgan, 102 and 103.

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