

## *Measure*

David Anfam

“He does not play dice.”  
—Albert Einstein

“Yet at what point do the blurry edges of measurement become sharp?”  
—Emanuele Lugli

“I’m not making illustrations of the sky or of mathematical theory.”  
—Dorothea Rockburne.

Since time immemorial humankind has looked to the heavens for clues to understanding itself and more. Astrology and astronomy count among the oldest professions. Indeed, in classical times the two pursuits were held as one under the Latin noun *astrologia*. Throughout the works in this exhibition, Dorothea Rockburne has engaged, nay, empathizes and battles with Giotto di Bondone (c.1267–1337). Several of them, such as *Giotto’s Light*, bear titles that include his name, while the *Lamenting Angels* group references the Italian master’s fresco, *Lament Over the Dead Christ*, in Padua’s Scrovegni Chapel. Having first visited it around 1975, Rockburne now feels that “probably all artists breathe differently after they have experienced the Arena Chapel.” Looking back to Italy’s distant past—as Mark Rothko did in his rapport with the Paestum temples, Fra Angelico and other inspirations in that country—serves to illuminate the present for Rockburne.<sup>i</sup> “Illuminate” is used advisedly. Not only did Rothko choose the verb in reference to his Chapel’s purpose, but also if this latest Rockburne show has a message, its imperative tense must be: *Fiat lux!*

Given the above, it is worth pondering that—in the selfsame late medieval period as Giotto’s—astronomy was treated as the foundation upon which astrology could operate. Only in the seventeenth century’s Age of Reason did it altogether supersede astrology as a genuine science. Nevertheless, astrology still secretes its own special truths about the human condition since *le cœur a ses raisons que la raison ne connaît point* (“the heart has its reasons that reason does not know”)—a phrase coined, tellingly, by the seventeenth-century French mathematician, physicist and theologian Blaise Pascal.<sup>ii</sup> Aptly, Rockburne titled two 1986-87 oil paintings *I Am Pascal* and *Pascal’s Provincial Letters*. Their sharp triangular and rectangular planes still populate her visual vocabulary, yet much else has changed. Indeed, the marvel is that Rockburne, despite or perhaps because of nearing her ninetieth year, continues to reinvent herself. As a mutual friend remarked, “I’m fascinated by the explosion of energy seemingly coming out of nowhere.” Energy moves and so does time—a reminder that a decade ago the artist had a major retrospective at the Parrish Art Museum. Rockburne still seeks to understand “how this wonderful universe is wired.” She is not alone because the same question exercises my mind more than ever, albeit for somewhat different reasons.

As it happens, I wrote a substantial text for the Parrish retrospective. Therefore this essay is more concise with its focus mostly restricted to the new developments. It also prompts me to mull how my own trajectory and the world at large have changed in the interregnum. Bosom friends and a life-partner have died and others look set to soon go the same way. International travel—I remember the crystal-clear twilight sky visible from the plane during the flight back to London after my first meeting with Dorothea—has passed from being a pleasure to a hazard (assuming it’s even feasible). The Covid-19 pandemic rages around the globe with no end in sight. Extreme climate change affects the planet and the existence of those who inhabit it. Even Afghanistan where Sar-i Sang’s ancient mines yield lapis lazuli, the source for the ultramarine blue pigment that Giotto employed in the Scrovegni Chapel, is by a cruel irony in extreme turmoil after the withdrawal of foreign occupying forces... Nevertheless, the universe remains aloof, full with unsolved mysteries and, well, wonderful.

When considering our place in the scheme of things, the French philosopher Michel Foucault famously concluded: “As the archaeology of our thought easily shows, man is an invention of recent date. And one perhaps nearing its end.”<sup>iii</sup> Foucault may have been right. However, his dry pessimism has a flip side. With a nod to Rockburne’s interests and humanity’s plight, an old and serendipitously Italian proverb sounds apposite. “If you are living a moment of darkness, do not despond, remember that it’s in the darkness you can see the stars.”<sup>iv</sup> To which, as it were, Rockburne’s 1987 title *The Light Shines in the Darkness and the Darkness Has Not Understood It* responds, as does her remark about the past few years’ output: “I’m not making illustrations of the sky or of mathematical theory. I too, am trying to create parallel phenomena.” Whatever lies at the root of these phenomena poses a puzzle so profound that sometimes we joke about it:

Have you heard?  
It’s in the stars

Next July we collide with Mars.  
Well, did you evah!  
What a swell party, a swell party...<sup>v</sup>

In similar vein, this very week the so-called Guennol Stargazer from the Chalcolithic period (3,000–2,200 BC) made art news headlines due to its blocked restitution to Turkey. That “Stargazer” is the figurine’s colloquial nickname on account of the whimsical laid-back head—its real activity or purpose continue to baffle—is irrelevant. Why otherwise call it “Stargazer”? A few months earlier, a team of astrophysicists at last proved that Albert Einstein’s General Theory of Relativity (1915) applied beyond the Milky Way. They observed immensely distant objects in outermost space massive enough to deform space-time. Meanwhile, the human domain shrinks under science’s scrutiny in tandem with an ever-expanding universe. Here I cannot resist triangulating three c’s.

On a clinical level, the Covid-19 virus transpires to be remarkably clever at mutating; the Calathea houseplant in front of me is sensible enough to fold up as the daylight wanes and to unfold at dawn<sup>vi</sup>; and on a cosmic level Einstein knew enough about reality to aver, “He does not play dice.”<sup>vii</sup> There’s the rub. Einstein could not identify the entity or force that controls everything.

That such an arcane order exists, I myself have no doubt. An agnostic, Einstein was not subscribing to the “Intelligent Design” thesis that argues for a conventional Judaeo-Christian God. Rather, as he had already deduced, the key is time. Since we live in duration and cannot get outside it, a solution to the space-time confluence is not ours to fathom. Nor could Einstein, who spent his later career seeking to establish a Unified Field theory that would join all the various dimensions.

If the foregoing sounds like a digression to nowhere, its substance stands at the core of Rockburne’s creative odyssey. Her title, *Blue Collage, A Geometry of Time*, says as much, as does the sub-title given to two pieces, *Arcane Light*. Likewise, her canny reflection, “Astrophysicists say that we are made of old stars from the time of the Big Bang. Now, when I look at my hand, I know that I am made of old stars.”<sup>viii</sup> Geometries, light and temporality represent visual and thematic levers to prise open the imponderable, occulted reasons for reality’s order. As Rockburne declared, “I am trying to explore through art the very origins of creation...my work is about the unseen forces, which exist in a form of nature, which seeks to define substructure.”<sup>ix</sup> These forces energize all the pieces in the present selection.

Take the *Trefoil* series. Vivid, shiny rectangular planes with surfaces that vary from gloss to matt form successive layers, evoking a spatial and temporal panoply, substrata that at once shift backward and forward. Superimposed upon them hover copper wire circles and ellipses in different magnitudes. Surpassed only by silver, copper immediately suggests conductivity and thus generates imaginative and optical “electricity” for the viewer. Other associations follow in Rockburne’s reckoning and the spectator’s.

The artist notes that the ancient Egyptians mined copper from the Sinai desert, adding that “in the eighties I began to make work with sheets of copper that has never been shown.” The wire’s literal and metaphoric spin hints at planetary orbits. In addition, there is another allusion to the Old Masters.<sup>x</sup> To wit, Rockburne’s written explanation merits quoting in full: “While re-reading Vasari’s *Lives of the Artists*, I discovered that in his youth Pontormo had studied with Leonardo and of course in his drawings there is that extended, flowing, naturally rhythmic, sensuously logical, gracious line. Each pair of eyes in the Santa Felicita *Deposition* and *Annunciation* not only express the emotions depicted in the painting, they also mark a certain sensitive, elliptical movement within the painting’s overall composition. It’s as if the structure of those somewhat languid bodies is somehow being dictated, almost hung from the eyes, all the while balancing and descending toward the lower righthand corner of the panel.”<sup>xi</sup> From the body to celestial spheres, the *Trefoils* span the little and the large, intimacy and infinite expansion. Resonance rules. As such, they amount to natural powers reconfigured as precision-built circuit boards for the spirit.

Knots comprise another leitmotif. Rockburne encountered knot theory during her studies at Black Mountain College. In essence, knots—like the set theory that she has explored over and again—are about overlapping. To a degree, then, the *Trefoils’* coils can be considered knots unwound. The most surprising development in this respect is Rockburne’s sortie into sculpture. The quotidian materials employed in *Reflections* and *Interchange* bring the wheel full circle to her use of crude oil and tar in the installations done during the late 1960s and the early 1970s as well as the overlapping associated with set theory. Their apparent simplicity masks a daunting complexity. Namely, the mind-boggling twists and turns, allied to mathematical formulae expounded in a book on knot theory beloved to Rockburne.

Although subtitled *An Elementary Introduction to the Mathematical Theory of Knots*, author Colin C. Adams’s text soon reached beyond my ken. Fortunately, two issues that I could grasp came in the book’s first few pages. Each bears on Rockburne’s art now. The “trefoil knot” constitutes the simplest knotted configuration. It cannot be untangled into an “unknot”. For our purposes, visually it comprises three overlapping ellipses. These proved germinal for the arcing circular rhythms that in counterpart with rectangles energize Rockburne’s *Trefoils*. Put another way, what looks straightforward are twists and turns that defy undoing. In short, a nascent enigma. Secondly, Adams soon zoomed in to the knotty heart of the matter. “Interestingly enough, in the 1980s,” he wrote,

“biochemists discovered knotting in DNA molecules. Concurrently, synthetic chemists realized it might be possible to create knotted molecules, where the type of knot determined the properties of the molecule.”<sup>xii</sup> By this reasoning, knots offer a model for unravelling life and perhaps, given their role in physics, even the cosmos. From organic generation in this world, the next logical step is toward the next. There, angels belong.

Angels and trefoils tie the knot, so to speak, between Rockburne and her love affair with Giotto. To link her looking back to such Old Masters tempts one to suppose that retrospection reflects to old age. If so, an obvious comparison is with Pablo Picasso. True, from the outset, the Spaniard knew his art history. Nevertheless Picasso’s most intense engagement with predecessors such as Diego Velázquez, Rembrandt van Rijn and Eugène Delacroix happened when he was well advanced in years. Not so Rockburne, who has long meditated on the past. Furthermore, her style as displayed in this gallery is a genuine late one. But it is the exact opposite of what musicologists and art historians mean when they use the term *Spätstil*. According to their accounts, what typifies “late style”—be it Titian or Beethoven—are hallmarks such as looseness, discontinuity, lacunae, fragmentation, extremes, silence, and so forth. On the contrary, Rockburne’s new work is perhaps more highly calibrated than ever—its contours razor-sharp, the colors singing clear as a whistle, the materials lapidary and order—whether it be a triangle’s tilt or the angular play that animates the multipartite *Giotto’s Kiss*—triumphant. To rephrase a memorable line from Wallace Stevens, Rockburne hones the access of perfection to the plane. Order by definition entails measure. Both qualities lead to the final act in this unfolding pictorial narrative. Scant surprise that Giotto acts as its director.

In his summa, the Scrovegni Chapel, Giotto fused intellectual rigor and order with sensuous immediacy. What could be more attractive to Rockburne (or on a lower rung, myself)? To step into the Chapel is to enter a miniature but vast model of the theological cosmos—ranging from birth to death, resurrection to the end of time, as two angels roll up the sky at the Last Judgment. Depths (Hell, *The Kiss of Judas*) and heights (the star-filled azure vault, the throne of Christ the Judge in an iridescent mandorla at the central summit of the internal end wall) balance each other in just measure. An immersive blueness engulfs the spectator with an amplitude compared to which modern counterparts such as Yves Klein’s trademarked blue or Barnett Newman’s celestial *Cathedra* (1951), pale. Scrovegni could afford the ultramarine pigment that had only just been introduced to Europe. Giotto understood how to exploit it to the maximum. His sumptuous blue (he saved a sour cyan blue-like tint for Lucifer and the devils), red and gold provide a window onto Rockburne’s rich contemporary palette. It encompasses the intensely chromatic frames in the *Blue Collage* series and the paeans to blue that comprise the *Giotto* trio and the *Lamenting Angels*, where it turns darkly somber. Giuliano Pisani’s *The Scrovegni Chapel: Giotto’s Revolution* is the latest account to do justice to its subject. Pisani summarizes Giotto’s achievement well and in terms that apply to how it is Rockburne’s veritable muse: “Giotto revolutionizes the language of painting, humanising the divine... highlighting sentiments and passions on faces and in gestures, inserting spatial perspective that referred to planes and depth... This magical place of world art thus becomes a grandiose synthesis of medieval philosophical and theological thinking, which continues to speak to us... with a language that is ever surprising.”<sup>xiii</sup> This language fuels Rockburne the chromophilic in her eighty-ninth year. You can tell by her voice: “On the Giotto drawing, *Lamenting Angels #3*, I’ve added a subtle pink but like the other angels it’s mostly indigo blue. The pink is as Giotto did. Today, as did Giotto, I add a slight touch of dripping golden beige.” As for Rockburne’s meticulously exquisite materials—from heavy hand-made papers to Lascaux Aquacryl’s mellifluous, velvety mat finish<sup>xiv</sup>—they fulfill now what Giotto accomplished in his era. That is, in an age where plastics have long made the sense of touch insensate and matter itself increasingly cedes to cyberspace and immaterial virtuality—they re-sensitize the observer. One final ingredient completes the whole equation. Measure.

The mathematics, knot/set theory, precision, geometries, countermanding emotional states and other qualities that Rockburne alike holds dear in one way or another depend on measure. So does balance, as in the symmetries and other specular compositional traits that run throughout *Giotto’s Angels & Knots*. On this score, an artist otherwise remote from Giotto and Rockburne is worth quoting. Serendipitously, he happens to be Italian. The name is Fausto Melotti. It is hard to imagine that the highly thoughtful Rockburne would disagree with Melotti’s succinct statement: “At the centre of creation, not man, but thought measures the universe.”<sup>xv</sup> Nor, one imagines, would Giotto. Why? Because measure was axiomatic in medieval Italy.

In his fresh analysis, *The Making of Measure and the Promise of Sameness*, Emanuele Lugli reveals that measure was literally writ in stone on the walls and columns of churches and cathedrals in Italy at the time when Giotto painted the Chapel for Enrico Scrovegni (as an affluent banker, he would have grasped calculations and measurements down to his last coin). The purpose of these incisions, embedded rulers and measuring rods attached to sacred buildings was to provide standards for all to see and touch when making the calculations necessary for transactions that involved the staples of everyday life such as cloth, grain and the land itself. Lugli concludes, “Measurements came to be seen as twofold: ratios belonging to the realm of ideas, and the most physical of tools. Such ambiguity makes measurements occupy an unusual place in the cultural landscape of the Middle Ages.”<sup>xvi</sup>

Might an analogous ambiguity continue to drive and lend richness to Rockburne’s art, which overall combines myriad cerebral elements drawn from mathematics and other scientific disciplines with intense

physicality? Why else the titular allusions to Archimedes, Socrates and Galileo? The first and the last thinkers obviously put calculations and measure at the core of their scientific theories.<sup>xvii</sup> From another perspective whether Socrates was religious or an atheist has been a debating point since antiquity. Lugli finds a similar ambiguity in his subject: “Yet at what point do the blurry edges of measurement become sharp?” Rothko – whose thought was prone to alternating between the religious and the material/secular/carnal, just as his paintings mingled exactitude with the blur – could be the nexus that knots these contesting threads together.

In a nutshell, when asked “Am I right that in your approach to your work, *color* means *more* to you than any other element?” Rothko answered, “No, not color, but *measures*.”<sup>xviii</sup> He meant that “measures” transform color into emotions. Emotions, as Rockburne has said, are the stuff of Giotto’s impassioned magic: “The *Lamenting Angels* reference Giotto’s lamenting angels, above, as Mary holds the dead Christ. Giotto is said to have remarked that the joy he derived from painting the Arena Chapel was that it brought him closer to the life of Christ. Religion at that time was different than it was to become.” In Giotto’s symbolism the trefoil signified the Trinity<sup>xix</sup> and he gave *Iustitia* (Justice), who holds a scale (the epitome of measuring) a central position crowned by a trefoil arch.<sup>xx</sup> When I asked Rockburne “Are you religious?,” she replied, “When I ask myself that question I always find myself remembering what Matisse said when he was questioned after completing *Vence*, his answer was ‘No, but God guides my hand.’ That is exactly my heart as well.” With a kindred sentiment Einstein said he was a “deeply religious non-believer.”<sup>xxi</sup> This oscillation between hearts and minds, faith in art and ideas or both, vivifies Rockburne’s work today with its unusual, striking pizzazz and, ultimately, poignant charge.

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