CORONA invites submissions of essays, fiction, poetry, art, reviews, photography and other achievements which defy categorization. CORONA is a journal for those who see boundaries as entrances and ends as beginnings. CORONA brings together those who work and play on the edges of their disciplines, those who sense that insight is located not in things but in relationships, and those who suspect that the imagination is involved in what we know.

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They were sitting side by side in a meadow on a mountainside when Lucy first began to talk about the game. Below them lay the Asopos valley hedged with the soft green of spring; a small lake, blue as deep as polished cobalt, gazed serenely back at the gentle blue of the sky. They were friends now, able to sit there together, at peace, the old battles far behind them; not forgotten, of course, but deep in the past. On matters of principle, certainly, they would always remain worlds apart; and Michael would still sometimes become wary, a little defensive if certain subjects were broached. Yet they had found it possible to become friends again, in a way.

There were so many places where they both went often; and the earth is not large. First, they just saw

*based on a passage in John Archibald Wheeler's *The Quantum and the Universe*
each other and passed by; then, by accident or design, they began to meet more frequently—and Lucy, at least, had apparently decided to act as if nothing at all had happened. They began to walk about together. Lucy began to notice, rather to her satisfaction, that Michael was not immune to certain charms. Though perfectly decorous in his demeanor, he gave every sign of being attracted to everything feminine, she decided, and she began to indulge this predilection of his. Each time she appeared, her hair was just a bit longer, her hips a bit slimmer, her summer frock somewhat more coquette; a silver bangle, an ivory hairclip, a touch of color at her waist. . . . For his part, Michael could not help but notice this development in Lucy's persona. He concluded that she was not immune to certain worldly charms, that she was especially attracted to the masculine—and it pleased him to give her such pleasure. When she moved so gracefully in his sight, always looking up to him when he talked, lips slightly parted, eyes rapt with attention, he experienced the pleasure of pleasing her. So he, to indulge this harmless predilection of hers, became masculinity incarnate, as you might say; appeared indeed, when they were alone and far from human gaze, as masculinity itself.

Lucy was talking about a game she had played at a party she had been to, not far from here, she said, with friends from Nineveh.

"One person leaves the room; the others then agree on some word, like 'cup' or 'tree.' The player comes back in and asks one question of each person, in turn, until he knows what the word was. He tries to guess in as few questions as possible."

"You mean," said Michael, who liked to be precise, "that after each answer he makes up a little hypothesis for himself, which he then tests with the next question?"

"Exactly." Lucy knew that he, too, was fascinated by play and games; he had once called them man's most astonishing invention. Short of gate-crashing a party, though, or accompanying Lucy to one—she was much closer to people, but he had his doubts about the company she kept—he could not see how he could ever play in such games himself. He said as much. Lucy moved closer to him as she talked; her silk-sleeved arm, forgotten, lay touching his.

"But listen, Michael, people are always asking
questions in one way or another. We could play the game with them without saying so, always making sure that they got some specific answer. Don’t you see? We could play it with them, you and I answering questions in turn—rather, producing answers for them—and never let on what we are doing.”

“What sort of questions? What would you and I agree on beforehand? How would we answer?” He was feeling puzzled, confused, as if he were missing something obvious, as if something in the landscape would not focus.

“Well, you see...” Lucy was looking away from him now, her fingers playing idly with some buttercups in the grass, sliding down beside him to lie on her side, “At the end of the game, I proposed a little change. When the last player went out, I proposed that we should not agree on anything. But everyone who answered had to have something in mind that satisfied all the previous answers. It was very exciting, because in this way, everyone became a player, everyone had to make up his little hypothesis as you would say. And it was much more exciting because, just as that little cat thought she had guessed it, the next answer would be a total surprise!”

Michael smiled at this bit of motive showing through; then suddenly he sat straight up. “Lucifer! People could be misled in the most harmful ways if we started producing answers to their questions in this sort of way! Everything they believed would prove false, every acquired skill become useless as their assumptions crumbled one by one...”

The use of the full name, Lucy knew, cutting through their boy-meets-girl fantasy, was a clear sign of Michael’s wrath. She had to act quickly if she was to rescue something from the situation. Sitting up too, instinctively straightening her frock over her knees, she said demurely, “Of course I would abide by the terms of my Dispensation, Michael, you know that. Unless I get special permission, as in that case of Job, I cannot test people to the limit; and I would never be allowed to make the world unliveable for them, nor to tempt them more than they can resist, if they so choose. But Michael, they have adapted well to this world on the basis of what they know and believe—that still leaves a lot of leeway. I just wanted to think of a game that you and I could play, Michael; really I meant no harm.”
Beside her, Michael stared out over the valley. Was she trying to subvert him? Memories of long ago stirred in him, but it had all been so totally different then. Majesty set against majesty, the legions of number beyond number, and the legions of the damned, driven out... There was no comparison. Was he, instead, perhaps simply falling prey to vanity? He was a trusted, valuable servant, certainly; he had led those legions of heaven in the decisive battle against Lucifer, those many aeons ago; he had, with flaming sword, driven the fallen humans from Paradise; he, with a rain of fire and sulphur had cauterized the festering sores of Sodom and Gomorrah. But it would be a great mistake to start thinking that he had the power that won the battle, that the fate of earth lay in his hands. Such pride would be clear hubris, exactly Lucifer’s sin.

He stole a glance at Lucy beside him. Was she then perhaps intending exactly that, trying to subvert him so subtly, to invite him to false pride in just the way that she habitually extended those seductive incitations to the human race? Of course not! The days of her designs on heaven itself, on the loyalty of the angels, were long past. Both now wandered the earth, like gardeners with rival theories and exactly opposite ideas about when to prune, where to seed, but each respectful of the other’s position—and, personally, friends. Lucy spoke again.

“I was watching a man in Miletos not long ago. His wife insisted that he should scare away the birds which were ruining the kitchen garden, a really good scare she said, so that the birds would move away altogether. But he argued that birds don’t live anywhere, they just move around like itinerant sophists who teach in the market one day and are on their way to Athens the next. There are always more of them, both birds and sophists, and if you scare away today’s bunch, tomorrow’s comes just the same.”

His wife countered that even those sophists seemed to regularly spend half the year in Athens and the other half in Miletos, and anyway, the birds were as sedentary as her useless husband. So the man went out the next morning and threw red cloth dye on the birds.”

Michael waited, interested despite himself.

“Of course the woman was right. Birds with red dye on their feathers appeared on schedule the next morning. Birds do live in one place, they make nests
and rear their young. But what harm would it do to have other sorts of birds as well? Some that migrate with the seasons, some that lay their eggs in other birds’ nests—there are lots of possibilities. The woman’s generalization was true, but it needn’t have been, and the man would have “discovered” this if I had changed some birds’ habits. Future generations, classifying all the varieties of birdkind, would then say that this man in Miletos had been an especially astute naturalist.”

* * * *

Michael looked up finally, and from his face Lucy knew that he had surrendered to his intellectual curiosity.

“You speak as if we could give them false answers without really deceiving them, or changing the world a bit so that the false answers become true—but how could that be?”

“No, Michael, no false answers at all! Think about what is settled about birds now, as far as the humans are concerned: the very same ones returned to that garden in Miletos the next day. That is a fact, it is settled. But the explanation of it isn’t; perhaps birds live all their lives in one place, or perhaps they migrate with the seasons, or perhaps the birds in Miletos are a specially sedentary sort while birds elsewhere are not. Now that such questions have arisen, we could settle them a bit more in one direction or another every time someone looks into them a bit further. We would deceive someone if we misled them into thinking of some settled fact that it was otherwise than it actually is—and I propose nothing of that sort!”

“You are twisting everything a bit, Lucy, because what is settled as far as humans are concerned is only what they know. What about our existence for example? I suppose that is not settled for humans one way or the other, but we would mislead them if we somehow made it a settled fact, as far as they are concerned, that we don’t exist.”

“That is certainly a case where we don’t have two options, Michael, and it is very clever of you to see the limits to the game so quickly. But the reason we don’t have two options is because a thorough job on a no-answer would involve us in suicide, or more impossibly
yet, going back in time and erasing ourselves further back. We can go back and settle things in the past; we can't change any facts that are already settled for us. You know that there are still lots of facts that are not settled one way or the other for humans or angels, of your sort or mine; and that is all there is to consider, isn't it? I don't know anything about birds, really,” she finished somewhat irrelevantly.

Michael absolutely jumped. “God!” he said, “How can you be so . . . .” Words failed him. “For God, who knows everything, everything is settled one way or the other! That is why we would be lying to that man in Miletos if we fiddled with the birds' habits.”

Lucy looked at him pityingly. “Now I know you are not thinking, Michael. God’s knowledge is like retrospective knowledge; he already knows all the details about how things will actually have turned out in the end. So whatever way we decide to settle the facts for that intrepid bird man in Miletos, God will know already how it all turned out in the end. That doesn’t mean we can't settle things either way.”

Michael’s head was spinning. “But Lucy, He decided it all beforehand, didn’t He? When He created the world, He decided everything, so in way He already answered everybody’s questions, and people just need to discover what His answers were. Every explanation is already there in what exactly He decided then!”

“No, Michael, that is silly. He just decided on some general outlines. Otherwise, what about free will? What people actually decide to do, He did not first decide for them. And what about the many things that happen by chance? Chance is just what happens when the outcome is not determined beforehand. And I am convinced there is much more like that. God decided that humans would perceive each other by light, with the eyes; but I don't think He decided on the explanation of how that happens—what light is like inside, so to say, and how it works, except that it has to make seeing possible. There could be lots of reasons for that.”

Michael tried one final sally. “We'd be creating the details of their world for them, filling in the gray areas of their past and future, determining the regularities in their experience, fixing the properties of their materials—arbitrarily lording it over them. They have a right to be free from such interference.”
But Lucy smiled gently, sure now of getting her way. "But no, Michael, don't you see the beauty of the Game? What answers we think up would depend on what questions they ask, and the questions they ask would be guided by the explanation they make up for themselves, tentatively, about the facts already at hand. They would be creating their own world as much as we—we would all be players, they and you and I, all taking a hand in what the world will, in the end, turn out to have been."

* * * * *

Michael agreed to play. Together with Lucy he went to the marketplace in Athens, where leisured citizens came to watch the farmers and the merchants, slaves, women, and barbarians, to delight in all the forms of chauvinism so near to their hearts, and to argue questions of politics and philosophy.

"Thunder is the noise of fire being quenched in the clouds," one citizen said; "Sometimes the fire is not quenched but falls through the clouds and burns trees and houses."

"This is indeed what men say, but their fire is by all accounts so intense and fierce that it consumes a whole tree in an instant, and may inflame a whole forest—if it is fire. Might it not be the axe of a god...?"

At this, his friends politely laughed. But one of them became quite pensive, perhaps because he was more pious than the rest, or perhaps because he still found thunder puzzling. Lucy, who was to be the first player in the game, watched him and followed unobtrusively when he left. That evening this man went into the field, and at once, the sky darkened. Great black clouds formed within an astonishingly short time. Then a single sheet of flame exploded against the sky, hit a solitary dead tree just in front of him, and was accompanied by a simultaneous clap of thunder.

The man inspected the tree and then rushed home; the clouds had cleared before he got there. The tree had been turned into coal, and the earth was charred; but apart from some pieces of wood smoldering quietly, all fire had disappeared at once.

Of course the next day he rushed to his friends in the marketplace, at the usual wine stall. Michael and Lucy were there to watch.
"There was only one flash of lightning and it was not quenched in the clouds, but in the tree it hit! Yet at exactly the same time there was a thunder clap, while the fire was in the tree. Whatever thunder is, it is clearly not the quenching of fire in clouds!"

Everybody smiled at his excitement. "This was at dusk, after your nightly flagon and a half of wine?" one inquired sweetly. "My paternal uncle was chased by a fury under similar conditions."

"With that lightning striking just in front of you, you were certainly not in any position to see whether perhaps some other lightning was being quenched in the clouds at that time!" another contributed. And several hands were pushing pots of wine in his direction.

Lucy turned around, quite disheartened, to find Michael smiling sympathetically. "Don't worry," he said, "other people will start noticing the discrepancy too, now that it is there, and eventually everyone will realize that the simple story does not fit anymore." He was quite happy now that he had realized once more that nothing short of a spectacular disaster would change human thinking quickly. They might ask questions, and the forthcoming answers might be surprising, but nothing more abstract than the price of eggs would stampede the marketplace.

Some years later, Michael was sitting, invisibly, in the corner of a room in the baths of Syracuse. The man he had been watching intently was playing with a sponge and a brush in his bath. Michael slowly shut down all the sounds from other bathers, from the chariots and horsemen outside, and tempered the lights, so as to let nothing interfere with the man's concentration. Suddenly the man leaped up, yelling "Eureka!"

Michael, startled, let all the sound and light pour back in. Still yelling "Eureka!" the man ran naked into the street.

Michael went out too, not quite so hastily. Outside, Lucy was waiting to congratulate him. Michael smiled triumphantly; and the smile of Michael Triumphant is a smile indeed. Lucy was smiling too, a thin little smile, reflecting on Michael's decision to have the densities of metals constant in their solid state, and remaining the same when the different metals were alloyed. Some day, she thought, someone would wittingly or unwittingly ask whether every solid had, after all, a
constant density and whether it remained constant under extremes of temperature and pressure. She would be ready.

“Oh, there are many beautiful possibilities,” she said, with a reflective little smile. “Can lead be transmuted to gold? Does light move like a stick pushed on one end, or is it made up of particles that speed like arrows shot from a bow? How does it get through the glass? Every concept they fashion will have its limits, every explanation its bounds, every theory its rival full of hidden riches of possible new phenomena. Yes, there are many opportunities yet for play.” And in her mind’s eye she saw already, in the far future, in answer to a human question, little pieces of star burning fiercely, briefly on earth; first in the desert, then in a city.