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Cyberspace, Cosmology, and the Meaning of Life

When on the Tuesdays before Thanksgiving only about half of my students in the large introductory ethics class show up, I reward the faithful with the promise to reveal the meaning of life. The announcement is always met with a ripple of laughter—a mixture of incredulity, curiosity, and good humor. The meaning of life, I say, cannot be borrowed, bought, or manufactured. It has to be discovered. And how do you discover it? Why, you use the meaning-of-life-locator. And what is that?

I then invite my students to search their experiences or aspirations for occasions where they could affirm four propositions:

(1) There is no place I would rather be.
(2) There is no one I would rather be with.
(3) There is nothing I would rather be doing.
(4) And this I will remember well.

Examples of such occasions are a dinner at home, a camp fire in the wilderness, or an evening's music, and for many of us it could be worship in a sanctuary.

The suggestion in all of this is that on those occasions the meaning of life comes into focus. The idea that focal occasions gather and disclose the meaning of life is not new. It's related to the Greek notion of the kairos, the auspicious moment, and to Virginia Woolf's "moments of being."[1] Of the many meanings of the first, focal occasions share the one that refers to the pivotal stature of the kairos in the rush and flow of time. With Woolf's moments of being, focal occasions have in common the comprehensive vision that is centered in a concrete thing. Yet unlike the kairos, focal occasions need to be regular, and unlike a moment of being, focal occasions have to be communal and affirmative.

In fact, once I have prompted my students to discover the meaning of life, I go on to urge them so to arrange their lives that focal occasions have a consistent and central place in them. That comes to saying that the meaning of life constitutes a two-fold task—locating focal occasions and securing an appropriate fit of the occasions with the larger context of the world. The search for such a fit is the essence of the fourth affirmation. Many a student could affirm the first three in a dinky bar among strangers on a Friday evening if only enough alcohol has flowed. But not the fourth.

Securing a central and consistent place for focal occasions in one's world is in part a prosaic task, a matter of moving to a suitable place to live, finding the right kind of job, making agreements with one's beloved, being firm when intrusions or temptations are threatening. These arrangements, we might say, take place in the immediate and tangible world.

But that world is itself enveloped by larger worlds that are mediate and imaginary, yet no less real for being such. In fact, the actual world right here and now that seems to be the epitome of reality imperceptibly shades over into the mediated and imagined worlds, and those worlds decisively inform the reality of the here and now.

Sitting at my desk, reading John Rawls's Justice as Fairness, I know what I'm looking at because I know its past and origin—it is a restatement of the grand Theory of Justice and based largely on lecture notes. But I also see my reading within a context of alternatives that are open to me and that I could or even should take up. Perhaps I should reread Michael Walzer's Spheres of Justice or finally read all of Robert Nozick's Anarchy, State, and Utopia. And then there are the farther reaches of space. What I see before me is not just a surface, but a wall; and beyond the wall the campus, the country, the planet, the solar system, and so on. Narrowly conceived, my vision is confined to the surface before me. But the surface would not make sense without its mediated and imagined background.

I will be concerned here with placing and securing focal occasions in these three wider worlds, the worlds of the past, of the possible, and of the present in its widest extent. We know the first and the last as history and cosmology. The realm of the possible today is cyberspace as I will explain. Each of these worlds has a connection to the three dimensions of focal occasions that are indicated by the first three of the affirmations, the dimensions of space, community, and engagement with reality. For the sake of economy, I will concentrate on the spatial aspect.

What does the foil of history disclose about today's focal occasions? Premodern occasions were set in a context of a religious and moral cosmology and in a texture of demanding engagements. Think of traditional physical Blackfoot life that proceeded under the gaze of Sun Chief during the day, Night Red Light during the night, and amidst the eloquent forces of nature throughout, a kind of life that in the evening came to a center of rest and light in the tipis. James Welch describes it thus: "The lodges of the Lone Caters were illuminated by cooking fires within. It was the time of evening when even the dogs rest and the horses graze undisturbed along the grassy banks."[2]

Rest and Light, requies aeterna et lux perpetua, are what Christians must have valued and wished their departed. The sky was heaven, and daily life was marked with the sweat of the brow. Under the heaven and surrounded by work, there were the daily and the festive occasions of prayer and celebration. A festive occasion exhibited the characteristic spatial structure of premodern life. The occasion was usually centered on some landmark, the sun dance lodge or the village church and overarched by the cosmic order. The physical center and the cosmic context gave premodern space its orientation.

Today's focal occasions can have much the same appearance as their premodern ancestors—a campfire in the mountains, a dinner table with candle light. But that appearance is semblance as becomes clear when we see those occasions against the backdrop of what heaven and engagement have become—the cosmology of astrophysics and the world of information technology. Of these two contexts, the former is well-articulated (though fraught with unanswered questions); the latter requires definition, however. Information technology, as I use the term, has three defining features. First, it is digital (and generally binary). Its digital shape makes it both robust and workable. Analogue information by comparison is constantly subject to decay and is as awkward to sort and sculpt as a stew. Second, it is electronic or photonic, properties that account for the incredible speed at which massive amounts of information are stored, processed, and transmitted. Third, it is optically and acoustically mediated in minute detail, with great brilliance, and on canvasses of every size. Like its predecessors, information technology serves many masters—science, utility, and pleasure. Culturally, its third function is most influential, and the totality and accessibility of that function I call cyberspace. It's a space defined more by its advanced instances than by its boundaries. In fact, the blurring of functional boundaries is a hallmark and a predicament of information technology.

What are the cosmological and technological challenges we must meet if we are to place and remember our focal occasions well? Imagine a life that is resolutely concentrated on focal occasions to the exclusion of cosmology and technology, the life, for example, of a person who waits on tables or who works on construction to pay the rent and otherwise spends every available moment hiking and camping out in the wilderness. It would be an idyllic sort of existence, based on physical fitness and skills, alive to the forces of nature, and attuned to the changing seasons. But it would also be a precarious life, dependent, not to say parasitic, on the work and good will of people conversant with science and savvy about technology, the kind of people who use science and technology to track and slow global warming, to protect wilderness areas, to design and manufacture tents and backpacks, pots and cookers, food and clothing. An idyllic life like that, though in some ways admirable, would be lived in the shadow or even darkness of ignorance and indifference. It would be wrong in claiming orientation from heavenly divinities and everyday engagements. It would be idyllic, imperiled, and irresponsible.

We have to acknowledge and enter cyberspace—that seems to be the ethical imperative. So it may have been ten or twenty years ago. Today more and more people are always and already in it. There was a time, a generation ago, when access to (mainframe) computers was expensive, limited, and awkward. Then came the period when personal computers became available, but you had to master the arcane conventions of the Disk Operating System (DOS) to get around in cyberspace. Today we easily and constantly navigate the information ocean on screens large and small.

Technological information, however, has not really taken the shape of an ocean with distinct shorelines and dry land. It's more like a flood that increasingly submerges the contours of the tangible and emotional world. Palm Pilots, Treos, Blackberrys, and now the (misleadingly named) iPhone have given it a brilliant and manifold ubiquity. The reality of rigid and discrete things has yielded to the fluid availability of cyberspace. Reality to be sure is still needed as the platform to stand on, the air to draw on, the food to live on, just as microchips, energy, and software are needed to make a computer or television screen come alive. Actual reality evolves into two functions relative to cyberspace; it constitutes its machinery and its raw material, i.e., its substructure and the impetus of its contents.

From the standpoint of focal occasions, cyberspace is the great distraction. Qua television it invades and dissolves the dinner conversation first and the dinner table finally. Qua Treo it follows the hiker into the wilderness and diverts attention from the then-and-there. Like life-giving water, cyberspace helpfully insinuates itself into the crevices of reality only to erode what it has promised to nurture. Perhaps, while sitting down to dinner, I'm awaiting an important phone call. There it is, my Blackberry says. The call is mercifully brief; but hey, there is an even more important email. And while I'm at it, how is the book doing that my correspondent has mentioned? And didn't the

Giants just finish a crucial play-off game? By the time I look up, everyone has left the table.

And is it not irresponsible to venture into the high country in the fall without a cell phone to call for Search-and-Rescue should a broken limb and rising snow threaten disaster? And should I not be able to give the search parties my GPS coordinates? My Blackberry will provide all this (remember, you heard it here first), and since I had to take it along anyway (powered by the photovoltaic cells on my backpack), why not email my friends in the cities to tell them how idyllic it is here by the campfire on a high meadow in the Rockies? And shouldn't I keep up with what's going on in the world as well?

The seductive distractions of cyberspace can in part be explicated by comparing the spatial structure of focal reality with that of cyberspace. The structure of electronic information is in an informal sense topological. Cyberspace has a structure. Sites are nested and linked on the screen in a definite order. But there are no measurable distances between them. Everything is equally near and far and equally and easily reachable, and hence I easily slip from the important by way of the interesting to the distracting. In focal reality, some things are near and others far. The camp fire is by the tent. It's a hundred paces to the creek. The food is suspended fifty yards away and fifteen feet off the ground. The trailhead is fifteen miles away. The candles are lit on the dinner table, but the food is still in the kitchen and the wine in the basement. The mail is down in the mailbox, the concert will be two miles from here.

Curiosity, the eagerness to inquire and find out, was crucial in a Neolithic setting, and it was constrained before cyberspace. You had to wait for the paper, go to the library, or attend a concert to find out what was out there. Cyberspace eutrophicates curiosity; it provides too many nutrients everywhere and all the time. Curiosity, as a result, becomes restless and shapeless.

Curiosity, since the beginning of the modern era, has attained its most disciplined and incisive form in science, and correspondingly we think of its findings as giving us the most objective and penetrating account of reality, the one we rely on in the pursuit of health, security, and prosperity. When the chips are down and a decision has to be made in the face of illness, terror, or destitution, we go with magnetic resonance imaging rather than a psychic's vision, with an x-ray scanner rather than a prayer, and with high-yield rice rather than the propitiation of divinities. These technologies are more than science, of course. They embody ingenuity, incremental improvements, vigorous marketing, and more. But what gives research and development, engineering and manufacturing their distinctive power is their consistency with biology, chemistry, and finally physics. Physics at the limits of the very large and the very small is relativity theory and quantum theory. These two reveal the ultimate structure of reality. It looks like a forbiddingly austere and abstract world.

It is so in two ways. The authoritative statements of astrophysics are written in the language of mathematics. While the mathematics Newton used and had to invent has become part of a good high school education, the mathematics at the cutting edge of physics is too difficult and abstract for all but specialists, a very tiny fraction of humanity.

First-rate physicists have written wonderful books to make the abstractions of mathematics intelligible and intuitive. Like all lay people, I'm heavily indebted to them.

But these authors find themselves having to exchange one abstraction for another, the abstractions of mathematics for the abstractions of structures that are isotropic, homogeneous, devoid of absolute time, without unequivocal positions, and with unintelligible connections between events that are instantly correlated over distances of billions of light years. To drive their point home, these writers feel compelled to tell us that the concrete world of our here and now is an illusion.

As the topology of cyberspace highlights the spatial structure of focal occasions in one way, so does the isotropy of the cosmos in another. Here again I will limit the discussion to one issue of spatial structure. To say that the structure of the cosmos is isotropic is to say that it looks the same in all directions. At its largest scale it exhibits no distinctive directions and contains no special places. Isotropy clearly contrasts with the spatial structure of a focal occasion. Such an occasion constitutes a spatial center; there is no other place like it ad none more desirable. It has a surrounding periphery, and it exhibits the up-and-down orientation that is part of everyday life and reflected in countless metaphors. Here too we can use a technical term in an informal sense and think of isotropy as a more-or-less rather than an all-or-nothing property. Isotropy accordingly can grow. Privileged places and directions may not disappear, but they can pale.

The up-and-down direction, though it obstinately rules our bodily feeling and perception, was weakened long ago when the global shape of the earth was discovered. Today's globalization has attenuated it further, especially for the most advanced citizens of the new millennium, the ones for whom China or Brazil is "up" as often as North America. For those same people, the actuality of the one place where they want to be above all others has been dimmed. They may no longer have one home, but then many of us ordinary people would be hard-pressed to say what our hometown is. Nostalgia, first diagnosed as the wrenching pain Swiss mercenaries suffered when torn from their mountain villages, is becoming a thing of the past. The world for the mobile and the affluent is beginning to look the same in all directions, the same airports, the same hotels, the same malls, one and the same cyberspace. Thus the advanced global culture mirrors to some extent the isotropy of the universe.

The world no longer has a central point, neither on this planet nor in the cosmos. Everyday life and especially festive occasions on earth still reveal traces and recollections of focal points, of the college we attended, the place we got married, the capital where a new president is installed. It's the universe that impresses radical pointlessness on us. "The more the universe seems comprehensible," Steven Weinberg has memorably said, "the more it also seems pointless."[3] He did feel nostalgic about the passing of the premodern world, and a decade and a half later he said this about his celebrated remark:

Indeed it was—nostalgic for a world in which the heavens declared the glory of God. About a century and a half ago Matthew Arnold found in the withdrawing tide a metaphor for the retreat of religious faith, and heard in the water's sound "the note of sadness." It would be wonderful to find in the laws of nature a plan prepared by a concerned creator in which human beings played some special role. I find sadness in doubting that we will.[4]

Weinberg's lament is of a piece with Lee Smolin's counsel:

So our world is incredibly big, slow and cold compared with the fundamental world. Our job is to remove the prejudices and blinkers imposed by our parochial perspective and imagine space and time in their own terms, on their own natural scale.[5]

While Weinberg has primarily the large-scale structure of the universe in mind, Smolin is thinking of the granular bottom scale of reality with its irreducible spans of time and space and its ultimate degree of temperature. And while Weinberg is nostalgic, Smolin displays a no-nonsense sobriety as does Brian Greene: "The overarching lesson that has emerged from scientific inquiry over the last century is that human experience is often a misleading guide to the true nature of reality."[6]

Focal occasions are left in a precarious position between cyberspace and cosmology. The distractions of technological information appear to contaminate them and the abstractions of astrophysics to dissolve them. Yet focal moments cannot be saved by immunizing them against cyberspace and secluding them from cosmology. Such measures would leave them dark and mistaken. We could not remember them well. Cyberspace illuminates the perils and responsibilities of focal occasions; astrophysics clarifies the passing of the firmament and the disappearance of the cosmic center.

In reply we need to remember the focal affirmations. The crucial point of our being in the world is the focal occasion. It "breathes fire into the equations" of cosmology, to adapt Stephen Hawking's remark; and in the face of technological distractions, it enables us, in the words of Henry Bugbee, to "bear witness to that which cannot play us false."[7] A focal occasion gives point to the universe and makes it concrete, and it orders cyberspace and makes it discrete.

Let me elaborate. In an insightful and resourceful book, titled The View from the Center of the Universe, Joel Primack and Nancy Ellen Abrams have pointed out that we constitute the center of the universe in several regards.[8] We live at the midpoint of the life of the cosmos. We occupy the middle in the scales from the largest to the smallest structures of the world. We consist of the rarest materials that make up the universe. From the total structure of the cosmos, Primack and Abrams have us focus in on earth and us. But why not focus on the eagles instead of us? Or on the sun instead of the earth? Or on the black hole at the center of the galaxy?

Seeing a focal occasion as the center of the universe is the complement to Primack and Abram's admirable work. It anchors and warrants the amazement we feel at the grandeur of the cosmos. More particularly, a focal occasion gives us the metric against which to measure the background that the cosmic structures constitute for us here on earth. To take just the one spatial feature I've been considering, we should consider cosmic isotropy as the ground state of reality and the focal occasion as the burst of meaning that centers the universe morally and therefore materially. Thus we can inhabit the isotropy of the universe more concretely. And so for the other seemingly outlandish properties of the cosmos. All this is little more than a conjecture of proposal. In any case it will take a more thoughtful and focused appropriation of the centers of our lives for people to muster the energy that's needed to take up the magnificent invitation Weinberg, Hawkins, Greene, Smolin, and Primack and Abrams have extended to us in their books, an invitation we need to accept if we are to be at home in the world today.

To deal with the confusing brilliance of technological information we need a point of reference that enables us to discern what in cyberspace is illuminating and what is distracting. It's a question of discretion that has a semantic and a syntactic side. To exercise semantic discretion is to focus one's curiosity on the information that we need to render our focal occasions central, regular, and responsible. Such information divides further into cultural, economic, environmental, social and other items.

By syntactic discretion I mean the structuring of the actual times and spaces, an ordering that involves the prosaic matters of the immediate world I considered earlier. The perilous flood of information needs to be banked and channeled. There have to be times and places that are secure from the intrusions of information devices, a living room, e.g., that has no electronic screens and whence Blackberrys, Treos, Palm Pilots and iPhones are banned. There have to be times, dinner time, e.g., when calls and news are excluded.

The life we should aspire to can be luminous, centered, and clear – illuminated by technological information, centered on focal occasion, and clarified by cosmology. A focal occasion, thus rendered responsible, can in turn meet the distractions of cyberspace with discretion and the abstractions of cosmology with concreteness. We're then in a position to remember it well.

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Author's Bio

Albert Borgmann was born and raised in Freiburg, Germany. He received an M.A. in German literature from the University of Illinois (Urbana) in 1961 and a Ph.D. in philosophy from the University of Munich in 1963. Dr. Borgmann, a Regents Professor since 1996, joined The University of Montana's Department of Philosophy more than 32 years ago. During his tenure at the University, he has earned international recognition as "the most rigorous and original philosopher of technology in the world."

The research of Albert Borgmann has been focused on the character of contemporary society, particularly the increasingly important role of technology in shaping our lives. His most prominent work includes, Technology and the Character of Contemporary Life (Chicago: 1984), Crossing the Postmodern Divide (Chicago: 1992), and Holding On to Reality: The Nature of Information atthe Turn of the Millennium (Chicago: 1999), Power Failure: Christianity in the Culture of Technology (Grand Rapids, MI: Brazos Press, 2003) have become important texts for scholarly study, discussion, and publication around the world.

Borgmann's areas of interest includes, philosophy of society and culture andphilosophy of technology. He has taught several courses on Ethics, such as the Great Traditions, History of Ancient and Medieval Philosophy, History of Modern Philosophy, Kant & Philosophy of Society and Culture. In his most recent book, Real American Ethics: Taking Responsibility for Our Country (Chicago: 2006) Borgmann asks us to reevaluate our role in the making of American values. Taking his cue from Winston Churchill who once observed that we shape our buildings, and then our buildings shape us – Borgmann considers the power of our most enduring institutions and the conditionof our present moral makeup to propose inspired new ways in which we, as ordinary citizens, can act to improve our country.

Source: Ubiquity: Volume 8, Issue 7 (February 20, 2007 - February 26, 2007)
<http://www.acm.org/ubiquity/>

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[8] Joel R. Primack, The View from the Center of the Universe (New York: Riverhead Books, 2006), pp.89-208.