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CONTINGENCY, PART I: A WORLD IN THE HANDS OF GOD

Christianity brings something new into existence. The Jew could walk, as one old expression says, beneath the nose of God. He could walk in God's sight and be guided by his word, but the Christian made a new claim: that he could encounter God in Christ and Christ in the unknown one who knocked at his door and asked for hospitality. We have talked already about how, in the age of the Church, this idea of the neighbour, this idea of acting out of a love which is a gift, gets corrupted by being defined as something which can be institutionalized, which charitable institutions can do much better than a bunch of individual Christians. Today I want to take up another uniquely Christian notion which I believe provided the door through which technology, in the Western sense, came into existence; and that is the idea of contingency. I will not argue that technology as we know it was in any sense a necessary, or inevitable consequence of this idea. I see this outcome rather as a surprise, a puzzle about which I would like to provoke curiosity.

Hans Blumenberg was one of the master thinkers of our time. He was a German professor, whose particular speciality was the epochal transformation that began to occur in European society around the time of Nicholas of Cusa [1401–1464] and Copernicus [1473–1543]. You can't really study that transformation without taking into your

hands his various works, now finally translated and available in English some twenty or thirty years after they first appeared. Blumenberg has a little article on contingency in the big standard German Lutheran encyclopaedia, *Religion in Geschichte und Gegenwart*, which is so pointed and concise that I couldn't possibly improve on it, and so I'm going to closely follow his exposition, using my translation, sometimes quoting word for word, and sometimes expanding and commenting as I go.

Contingency, Blumenberg says, is one of the few concepts that are of specifically Christian origin, even though the word itself is derived from a Latinization of a concept in Aristotelian logic: 'Contingency expresses the state of being of a world which has been created from nothing, is destined to disappear and is upheld in its existence by one thing, and one thing only: divine will. The idea that the world is contingent at every instant on God's will begins to be evident only in the eleventh century and is not fully fleshed out until towards the end of the thirteenth century. This is an event in the history of philosophy, but I believe that I can show you later on that what philosophers of that age expressed was a transformation in people's feelings. The world comes to be considered as something contingent, something indifferent to its own existence, something which does not bear within itself a reason or right to exist. This is something extraordinary. Other more competent persons may wish to try to compare this idea with Buddhist or Zen or Indian philosophical systems. My knowledge of these systems is too slight to allow me to try, and so I'm going to show that this idea of living in a world which doesn't carry within itself the reason for its own existence, but gets it from an absolutely necessary, personal, ever-creating God belongs to the unique axiomatic certainties of the twelfth, thirteenth, and fourteenth centuries. At this moment, the world's very existence takes on the character of something gratuitous. The world which is around me, the cat over there and the four red roses which bloomed during the night are a gift, something which is a grace. This moment of our being together, which I'm enjoying immensely, is not predetermined by some *karma*, isn't chance, isn't logically necessary, but rather is a pure gift. It's a gift from that Creator who keeps beings in existence,

and, by understanding things in this way, we can also see our own activity in sitting here in an entirely new light.

Now let me return to Blumenberg. The coming into existence of the antique cosmos, the cosmos of Aristotle, the cosmos of Plato, he says, was in no way dependent on the act of someone's will. The coming into being and the continuation of the world was simply an expression of its fitness for existence. Contingency played no part. This sense of things began to change with Augustine. Augustine answered the question of why God created the world with the incredible assertion *Quia vult*, because it pleased him, because he willed it, because he wanted it. In Spanish, I would say, *Porque me da ganas*. You can't quite catch the flavour of *ganas* in English, but it refers to a will which comes from pretty deep in the stomach. The world's existence, in this view, is the result at every moment of a sovereign act. One consequence of this strange belief in the sovereignty of will, of One will, of God's will is that it allows Scholasticism to make a distinction between essence and existence, between what things are and that they are — "cat" doesn't yet mean that there's a cat there — a distinction which also indicates the structure of the whole cosmos. It could just as well be that God would not have made us the gift of bringing this or that thing into existence.

According to Blumenberg, the scope of the idea of contingency expanded during the Middle Ages. In Dante [1265–1321], on whom I was fed as a kid, the operation of contingency in his *Paradiso* reaches only to the sphere of the moon, which is still within the Aristotelian scheme of things. For the Christian of the fourteenth or fifteenth centuries, it reaches beyond the moon. God himself is dragged into the realm of contingency. The will of God, Duns Scotus² says, is its own cause. This emphasis on the freedom of God which one finds in the Franciscan tradition of Bonaventure,³ Duns Scotus, and Francis himself, and which is so unsatisfactory to the modern mind, has two sides, and I'm speaking now as one who was strongly tempted by the great Franciscans. Bonaventure, for instance, brought God nearer to me by making him more like me. And absolute resignation before the will of God is something profoundly beautiful. But, it is also true that the emphasis on the supremacy and inscrutability of God's will in

Franciscan philosophy is finally pushed to the point where this will becomes arbitrary. Contingency at this point takes on the meaning which it still has today in English and French: mere chance, or instance. All one can say about what happens is that it happens because it happens.

One already sees this voluntarism, as Blumenberg calls it, in the thought of St. Thomas Aquinas [1225?–1274], but there it still remains poised and balanced, not yet tipping over into arbitrariness. Thomas, as you know, was important to me, both as a counterweight to the Franciscan tradition, and in a biographical sense. One of the great moments of my life, a moment when I was both proud of myself and humbled as never before or afterwards came when Jacques Maritain⁴ had a heart attack while teaching at Princeton. I was then a twenty-six-year-old guy working as a parish priest among Puerto Ricans in New York, and I got a call from the Institute for Advanced Studies asking me to take over the seminar Maritain had been conducting on Thomas's *De Esse et Essentia*, his crucial book on the issue we're discussing today.

Thomas makes a distinction between the possible and the necessary, rather than between the possible and the real, and it is the hypothesis of some recent scholarly writing on Thomas that Thomas wouldn't have arrived at this distinction if he had not been under the influence, coming from southern Italy, of Arab thinkers and holy men. The life of these men was marked, as you know, and is still marked by the recitation five times a day of a prayer in which Allah is referred to as the womb of what is and what is necessary: *Bismillahi rahmani rahim*. In this formula *rahim* means "the merciful, the all-good," but the word literally means womb, or more precisely the particular movements of the womb when it is inflamed by love.

Thomas senses the presence of God in everything and even every idea of which he can conceive, and not because this is the law of reality but because this is his goodness and his will. But, for Thomas, this will remains shrouded in the mystery of God, who is, above all, truth, truth beyond any conception, any imagination, truth which we better not even call "truth" because it is so far away from what we ordinarily call truth. And truth is good. And this sense of mystery keeps

Aquinas balanced, and not yet on the slope that leads towards modernity. One has to say, however, that a conception of God's will as arbitrary is latent in Thomas's conception of God as the supreme intellectual, and in this sense he does prepare the way for an understanding of the world outside of contingency.

Blumenberg argues that the beginning of modernity coincides with an attempt to break out of a world-view defined overwhelmingly by contingency. With the late Franciscans like William of Ockham [1285?-1349?] things still are what they are by the will of God, in the thought of René Descartes [1596-1650] each being finds in its own nature, what it is in itself, a reason and a claim, not only to existence, but to being what it is. Things are no longer what they are because they correspond to God's will but because God has laid into what we now call nature the laws by which they evolve. You can see the consequences of this idea in caricature in the genome project which is giving skyscraper-like visibility to a world in which contingency has become chance within genetic codes. For a long time, through the seventeenth, eighteenth, and even into the early nineteenth century, many of Descartes's successors remained true Christian believers who affirmed that God made the world as it is by placing the seed of nature into each thing. But the possibility of understanding things without reference to God had been created, because once God's will has become totally arbitrary it has also become, in a sense, redundant, and the connection between God and the world can be easily cut.

Contingency, in this sense, is a precondition for the modern view that each of us contains and possesses our own *raison d'être*. But I want to be as clear as I can about this term precondition. I am trying to point to notions which, in my opinion, can only be explained as the fruit of a widely shared understanding of the newness of the Gospel. And I use the word notions, in preference to category, concept, idea or word, in order to try and convey the involvement of feelings, feelings about the self, the other, and the world, as well as a certain conceptual and linguistic shaping. I am trying to put things as prudently as I can, but this is my research hypothesis, and I feel it would be wrong to allow myself to be deflected from it. I believe that this

understanding of the newness of the Gospel, the coming of this fool who was crucified, is something which goes on over the centuries. There is no other way, in my opinion, to explain the way in which St. Thomas Aquinas unfolds the notion of contingency in his voluminous, cathedral-like pages except as a digestion and penetration of Gospel truths, truths about the Incarnation, the embodiment, the fleshment and mutuality of love. And I call the discovery, shaping, and full formulation of this notion a precondition for modernity, not because modernity is founded on the idea of contingency, but because it was only in a society in which people had strongly experienced the world as lying in the hands of God that it would be possible, later on, to take that world out of God's hands.

One way of illustrating this is to look at the change in the meaning of nature between classical and modern times, as the historian Carolyn Merchant has done in an easily understandable book called *The Death of Nature*. One thing was certain in antiquity: nature was alive. There were different and conflicting philosophical interpretations of what nature was; but to all of them was common the certainty that *natura naturata dicitur*;⁵ that nature is a concept, an idea, an experience derived from birth-giving. Therefore, if we say of things that they are "natural," we say they are "born." This idea is deeply affected in the twelfth century by the sense of contingency. The whole of nature lay in God's hands, where it acquired its aliveness through God's constant, creative support. And Merchant quite correctly argues that, with this elevation, and, for me, glorification of classical nature, the condition was created by which, once nature was taken out of the hands of God, it could also lose its most essential quality, which is its aliveness. If, therefore, we look into the rise of natural science, and science altogether, in the seventeenth and eighteenth centuries, we are faced with research on a nature which not only lies outside of the hands of God, but has lost that basic characteristic of aliveness, which it had all through antiquity in our tradition. And once you have to do with a science which studies the working of a nature no longer alive — you can call it mechanical, you can call it necessary or give it any name you want — an issue comes up, which is characteristically modern: How do you explain, how do

you speak about life in a nature and among natural things which are not born but are, so to speak, mathematically programmed?

So contingency creates the condition whereby, in the sunset of contingency, nature loses not only its relationship to God, which was given to it in the high Middle Ages in this clear and explicit form, but also another characteristic which had nothing to do with Christianity: its aliveness. Modern science pre-supposes a nature which is not alive. But its precondition was the linking of the aliveness of nature with the constant creative activity of God. So we have to be very careful here because we are speaking about new insights which, for me, are very frequently glorious new discoveries, steps forward in the assimilation of the New Testament, but which also open up new possibilities of perversion and betrayal. A contingent nature at its noon is gloriously alive, but it is also uniquely vulnerable to being purified and cleaned of its aliveness in the sunset of contingency. And I have to see the newness of this concept in order to be fully aware of what is lost in its sunset and, ultimately, in the night which follows. What is dragged into oblivion is not just the Christian interpretation of nature, which I used here as an example. Classical Mediterranean certainties about nature, so deep that they are never discussed, are also enveloped in this night. To say it once more: once the universe is taken out of God's hands, it can be placed into the hands of people, and this couldn't have happened without nature having been put in God's hands in the first place.

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CONTINGENCY, PART 2: THE ORIGIN OF TECHNOLOGY

At this point, I want to take up a connected, and, I think, equally pregnant notion, and that is the idea of cause. This is an idea that has not been sufficiently studied by historians, but I believe that in the twelfth century there was change in the meaning of this word which was connected with the way in which the sense and the feel and the thought of contingency then permeated society. Up to this time, when philosophers spoke about *causa* — allow me to stay with the Latin, in order to indicate that I mean the idea of cause as it was then understood — they spoke in the tradition of Aristotle as it was fed to them through that great bureaucrat and saintly semi-martyr Boethius [480?–524?] and later on through Isidore of Seville [560?–636], another great bridgehead in the transmission of the meaning of Latin words to the high Middle Ages. *Causa*, in the Aristotelian scheme, has four subdivisions. There's *causa efficiens*, which refers to the source, or the reason, or the motive for an occurrence. If I move this pencil from here to there, then I'm the efficient cause of the movement. Then, there's a second reason why a thing is what it is, a reason we no longer call a cause, and that's the *causa materialis*, the material cause which refers to the character of the stuff out of which it is made. Next comes the *causa formatis*, the formal cause. It refers to the soul, or genetic plan of a thing — the formal principle that gives a cherry tree its unique and characteristic

wood, leaf, flower, and fruit. And, finally, there's a fourth reason for being, the *causa finalis*. Things are what they are because they are ordered to a given end. They have a goal, or proper purpose. *Scientia*, for the first Christian millennium, consisted in understanding what things are in the light of this fourfold structure.

Then, in the thirteenth century, something new and strange appeared in philosophy. I will speak of philosophy first because philosophers express the mentality, and the cultural certainties, of their time; but, as you will see in a moment, I am speaking of society as much as of the ideas of a handful of monks in a few newly founded university chairs. At the beginning of the thirteenth century, the *causa efficiens*, the only one of Aristotle's four causes that we still call a cause, got, so to speak, a stepchild. The category of *causa efficiens* developed a new sub-category called the *causa instrumentalis*, which was a cause without intention.

Now, if you ask me how I stumbled on this interesting development, to which no one else, so far as I know, has yet given any importance, I would have to say that this is because no one else has had the luck and the burden of studying scholastic philosophy as a friend of Carl Mitcham's. Carl Mitcham — I can't help but drag him in here — is a man considerably younger than I who taught at Penn State at the same time as I did and who has an extraordinarily vast knowledge of people who have written on what is now called the philosophy of technology. He's a kind of universal geographer of this field, who can tell you who's who and where each one stands and which river of thought runs close by and through which mountains the river runs, and so forth. When McGrath asked him to write an article on the philosophy of technology for the final volume of its revised *Encyclopaedia of Philosophy*, he claimed that technology hadn't yet made it into the hard core of philosophical thought because philosophers, and I would add historians as well, have always dealt with the concept of "tool" as if it were primordial and had always been around. Mitcham questioned this, and, with him, I learned to question it too.

Now, I'm the author of a book called *Tools for Conviviality*. When I wrote that book, I also believed that the idea of a tool as a means

shaped to my arbitrary purpose had always been around. But, if you look more carefully at what happened in the thirteenth century, this is not true. It's true that Aristotle has magnificent pages about the working devices used by smiths or woodworkers or jewellers, but what he speaks about are the *organa*. The word *organon* means both this pencil which I am holding in my hand, and the hand which holds it. My hand without the pencil, and my hand armed with the pencil are both *organa*. There was no way of distinguishing the pencil from my hand. *Instrumentum* had mainly a legal meaning, but not the meaning a legal instrument has today. It could not yet distinguish a tool from its user. Only in the thirteenth century was a *causa instrumentalis* distinguished as a subset of *causa efficiens*. Here lies the beginning of the possibility of putting together in one box, as I did in *Tools for Conviviality*, a car, a school, a scalpel, and an axe and seeing something in common between them. By this time tools or instruments in this new sense were already part of common, everyday speech. This is shown by two books which appeared simultaneously in 1128, *De variis artibus*, in which a pseudonymous monk calling himself Theophilus Presbyter writes on the instruments used by various artisans, and Hugh of St. Victor's *Didascalicon*, in which Hugh writes about the science of mechanics, the first time anyone has ever done so. The Latin word for mechanics derives from the Greek for machine, but Hugh has his character Dindimus give the term a revealing fantasy derivation, claiming that it comes from the word for adulterer, *moichos*. *Moichos* refers to "sowing wild oats," as one might say in English, and the term applies because this new kind of *causa efficiens*, which has no purpose in itself but only obeys the intention with which it is used, has, at first, a wild, not quite legitimate character. Tools are helpers which act partly like God and partly according to the laws of God, and, in this way, constitute a kind of wild oats.

Now, where did this idea, for which I think contingency was a precondition, come from? This question was answered, for me, by the work of a neglected and forgotten historian by the name of Theodor Litt, who some twenty-five years ago wrote a book on the heavenly bodies. I said a few minutes ago that, up to the time of Dante, one could still suppose with Aristotle that beneath the sphere of the

