

Article

Nature, Technology and the Imago Dei: Mediating the Nonhuman through the Practice of Science

Nature, Technology and the *Imago Dei*: Mediating the Nonhuman through the Practice of Science

Bret Stephenson



Bret Stephenson

In this article, I seek to question the role of technology, primarily as it is employed in scientific practice, in the mediation between humans created in the image of God and the nonhuman creation. I accept the position that human personhood cannot be separated from our relationship with the multiplicity of nonhumans with whom we share this realm of creation. Moreover, I seek to uncover the positive aspects of a technological mediation which participates in our increasingly technologized personhood. This study draws heavily on the work of Actor-Network Theorists (ANT) such as Bruno Latour and John Law, and Trinitarian theologians such as Colin Gunton, in an effort to open up an interdisciplinary dialogue among theological anthropology, the doctrine of creation, and these fascinating sociological accounts of the technological practice of science.

The traditional understanding of the imago Dei is taken to be essentially individualist and dualistic ...

Today it is quite common to find questions concerning the mystery of the human person wrapped up in the complex webs spun by the sciences and their technological practices. Debates surrounding genetic engineering, neurobiology, ecology, politics, and sexuality all carry the underlying question: What is it to be a *human* being? Moreover, what is it to be a human in the face of the Other: other humans, non-humans, and God? Many of the recent theological responses to this issue have sought to speak specifically to bioethics, eschatology, or artificial intelligence. But in this paper, I will seek to bring theological anthropology into conversation with some of the recent currents in the growing field of science studies, particularly the work of Bruno Latour. Part anthropologist, part sociologist, and part philosopher, Latour has built a career out of tracing the human, nonhuman, and technological networks which scientific practice

inevitably produces and negotiates in the interest of bringing the world—that is the nonhuman world—into human political discourse. Before turning to Latour’s account of technological action, I first will review some of the recent currents within theological anthropology while seeking to identify one of its major blindspots. When speaking of the human person in a theological context, we are never far from those peculiar words from the first chapters of Genesis which refer to humans being created in the image of God.

Locating the *Imago Dei*

The Traditional Individualist Account

Though the phrase “image of God” appears no more than three times in the Hebrew Bible, it has become the centerpiece of reflection concerning the Christian understanding of the human person. Christian doctrine concerning the human imaging of God, or the *imago Dei* as it is known, has experienced repeated revision throughout the Christian tradition. But as many recent studies have shown, the *imago Dei* all too often has been associated with internal and ultimately static qualities of the human mind, namely a disembodied rationality.¹

Bret Stephenson is currently a lecturer in the Department of Environmental Studies at Baylor University. He is also in the final stage of completing his Ph.D. in theology at the University of Edinburgh, School of Divinity, New College. His research interests center around Christian environmental ethics and constructive theology in an interdisciplinary context. Outside the classroom, he enjoys rock climbing, kayaking, and traveling with his wife Priscilla. He can be contacted at Bret_Stephenson@baylor.edu.

The many problems associated with this static, internal, and individualistic understanding of the *imago Dei* have been well documented, but here I will rehearse just a few which have been outlined by Colin Gunton, a Trinitarian theologian. First, it has been widely remarked that by understanding the image as rationality we have precluded other equally, if not more important, aspects of the human person. And secondly, by emphasizing the internal mental characteristic of human reason, the tradition has largely accepted the idea that “we are more minds than we are bodies.”²

The deeply detrimental impact this understanding of the human person would have on the modern era can scarcely be overstated. Reshaped in Descartes’ *cogito* and Kant’s Transcendental Ego, the disembodied rational person of the modern era was nothing more than a “science-fiction nightmare” — to use Latour’s revealing expression — as we had now lost touch with our material embeddedness in a very real material world.³

In sum, the traditional understanding of the *imago Dei* is taken to be essentially *individualist* and *dualistic* as it gives little, if any, importance to the many relationships which constitute human persons in their own particular being. Although it served to give some account of where humanity stood between God and nonhuman creatures, the traditional individualist account carries no appreciation of the complex relationality which exists among God, humans, and the nonhuman creation.

The Relational Turn

It is for this reason that much of the recent theological reflection on the image of God has sought to reinterpret the image, not as an individually held static quality of the mind, but as a relational achievement which is constituted between others-in-relation.⁴ The direct theological model for this type of relationality is analogically derived from the dynamic, or *perichoretic*, relationality found at the very heart of God’s dynamic and triune being. Thus it is with the recently rekindled interest in Trinitarian theology, or the “Trinitarian renaissance” as it has become known, that specifically relational concepts have been appropriated for theological anthropology.

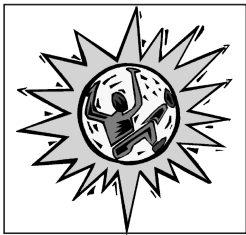
The work of John D. Zizioulas, a Greek Orthodox theologian, has been of particular importance in the popularization of this relational turn.⁵ His overall contribution has drawn much of its direction from patristic theology, but particularly that of the Cappadocian Fathers: Basil the Great, Gregory of Nyssa, and Gregory of Nazianz. And although his theological anthropology finds its ultimate form in ecclesiology — that is, the communal being of persons gathered in the body of Christ — it first forms its basis in a relational ontology of the person drawn directly out of theological reflection on the nature of God’s triune being. For Zizioulas, the Cappadocian fathers represent a revolution in their understanding that God’s being (*ousia*) is an

essentially relational achievement among the three persons (*hypostasis*) of the Trinity: Father, Son, and Holy Spirit. Therefore, the unified being of the One God is only to be found in the relational communion of the three persons. Thus *being* or *substance* is now the outgrowth of an ontologically prior *relationship*.

For Zizioulas, the Cappadocian fathers represent a revolution in their understanding that God’s being (ousia) is an essentially relational achievement among the three persons ... of the Trinity ... Thus being or substance is now the outgrowth of an ontologically prior relationship.

This ontological revolution ushered in by the Cappadocians is presently thought by many to provide our basis for understanding human personhood in similar fashion to that of the divine persons of the Trinity. And importantly, this new and specifically Christian ontology of the person stands in stark contrast to the *individualistic* and *dualistic* anthropology of the Greek philosophers. In Greek ontology, which produced the dualistic interpretation of the *imago Dei* we reviewed earlier, individual substances always preceded relation. In this sense, relations are what happen between already constituted individual substances. Personhood was thought to be a prefabricated and God-like or spirit-like substance that was merely added to our material bodies as if it were an afterthought. But in a fully Trinitarian understanding of personhood, we find that it is our embodied relationality which constitutes our being. We are, in fact, *nothing* if not for the relationships in which we exist.

This turn to a relational understanding of the *imago Dei*, built as it is on a relational understanding of God’s triune being, raises the problem of now describing and cataloging the varieties of relationship in which, and through which, we are ontologically composed as human persons. British theologian Colin Gunton has produced several books and articles addressing this very question from a rigorously Trinitarian perspective. In the final analysis, he identifies three major forms or types of relationality which serve to compose the being of human persons.



[Recent relational theological anthropologies] threaten to draw us back into many of the pitfalls which were produced by the traditional and individualist accounts of the *imago Dei*. What is needed is a detailed account of the intimate relationality, or commerce that exists between humans and nonhumans.

Article

Nature, Technology and the Imago Dei: Mediating the Nonhuman through the Practice of Science

The first relationship belongs to the “vertical” trajectory. Here Gunton argues that we are persons only as we exist in relation to the Triune God, but particularly through the Son and the Spirit—the right and left hands of God.⁶ As the “archetypal bearer of the image,” it is through the Son and by the agency of the Spirit that we are made to image God in the first instance.⁷ The second and third relationships fall under the “horizontal” trajectory, yet Gunton will argue that it is important that we see these “horizontal” relations taking their distinctive shape as the outgrowth of the ontologically prior relationship with Christ through the work of the Spirit. The first of these horizontal relationships has to do with what we might call *social* relationality. The social element teaches us that we reflect the *imago Dei* in that humans are ontologically established in community with other persons. In the third and final form of relationality, we learn that the human is constituted through its embodied relations with the “non-personal”—Gunton’s term—or nonhuman world. The relationship is, however, asymmetrical as the nonpersonal or nonhuman world is understood to be ontologically and eschatologically dependent upon humanity. Being created in the image of God, humans carry the “responsibility to offer the creation, perfected, back to its creator as a perfect sacrifice of praise.”⁸

We now can identify something approaching a kind of hierarchy of relationships which develops within Gunton’s theological anthropology. The first and privileged relationship belongs to the “vertical” human-God relationship. This form of relationality is, for Gunton, both ontologically and methodologically prior to all other forms of relationality as it is through relationship with the triune God that our relational and distinctively human personhood is revealed. Secondly, the “horizontal” human-human relationship (the social), is similarly ontologically prior to the human-nonhuman relationship. In sum, we primarily are constituted through our relationship to God, and then to a lesser degree through our inter-human relations, and least of all through our relations with the nonhuman realm.

One finds similar hierarchical formulations in the work of Zizioulas and that of Christoph Schwöbel,⁹ each of whom bases his relational theological anthropology upon a comparison of divine and human person-

hood. And although the relational and Trinitarian turn in theological anthropology has freed us from many of the problems associated with the traditional understanding of the *imago Dei*, they have largely failed to give any detailed account of the dynamic commerce which exists between humans and the multiplicity of nonhumans with whom we share our daily lives—a point recently made in an important article by Edward Russell.¹⁰

This is surely not to say that there is no weight given to human-nonhuman relations in these recent relational theological anthropologies. The issue here, as it is for so many other theological problems, is one of emphasis. For instance, by emphasizing the continuities between human and divine persons, and the discontinuities between humans and nonhumans, these anthropologies have served to further sever human sociality from nonhuman materiality. Or stated in what are, perhaps, more familiar terms, they threaten to further separate nature and society into an even more pronounced dichotomy. In a very real sense, they threaten to draw us back into many of the pitfalls which were produced by the traditional and individualist accounts of the *imago Dei*. What is needed is a detailed account of the intimate relationality or commerce that exists between humans and nonhumans. These horizontal relationships are, or rather should be, just as important to a theological anthropology as the detailing of continuities between divine and human persons.

Bruno Latour on Technological Mediation

It is on this point that I believe a theological engagement with the field of science studies, or science and technology studies (STS) as it is sometimes called, would be of tremendous benefit. Here I would like to briefly focus on one of the most successful fields, a methodological offspring most commonly known as Actor/Actant-Network Theory (ANT).¹¹ Although it is more of an academic “style” than it is an academic “theory,” ANT employs a relational ontology which is surprisingly similar to the relational anthropologies now populating Trinitarian theology, with the one exception, that the actor/actant-network style does not limit relationality or the ability to initiate relationships—otherwise known as *agency*—to the human

or subjective sphere alone. In fact, Bruno Latour and a number of other ANT theorists, have argued that the term “agency” has lost its usefulness in the tracing of networks that consist of multiple human, nonhuman, and technical actors. Therefore, in order to avoid the strong tendency of the social sciences to reserve agency for human actors alone, ANT has largely adopted the alternative term of “actant.” As John Law has explained, ANT “is a ruthless application of semiotics. It tells that entities [both human and nonhuman, technological and artificial] take their form and acquire their attributes as a result of their relations with other entities.”¹²

It is in this way that Latour can speak of “socialized nonhumans” or “quasi-objects.” For at the heart of ANT lies the radical suggestion that the modern dichotomies of society and nature, subjects and objects, realism and idealism were nothing more than a political settlement cemented into the philosophical and theological framework of the modern era—what Latour calls the “modern Constitution.”¹³ Latour has repeatedly suggested that we certainly do not live in purely human societies, and similarly that nature has not escaped socialization. Therefore, we should largely jettison these polemic terms—Nature and Society—and instead speak of *collectives* made up of numerous associations, or networks, of human and nonhuman actants. Thus, rather than to try to heal the divisions between the two poles of the modern settlement—Nature on one side and Society on the other—ANT seeks first to reduce all entities to the status of mere *humans* and *nonhumans*. These terms, it is argued, do not carry the political, philosophical, or epistemological baggage of the polemically opposed subjects and objects of the modern Constitution. Moreover, terminology such as this helps to remind us that we share our social worlds with countless nonhumans without whom social complexity simply would not exist.¹⁴

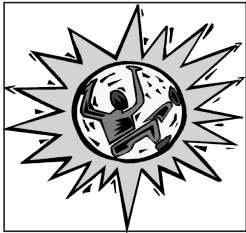
We also must recognize that in the actor/actant-network approach all a priori ontological distinctions are done away with—subjects/objects, structure/agency, knowledge/belief, mind/body—all dualisms are dissolved into heterogeneous networks and redistributed amongst the vibrant relationships between human and nonhuman actants. In ANT—as it is with Latour’s work as a whole—essences, ontologies, divisions, distinctions, and even *agency/actancy* are always the *result* of work, practice, relations, and actions that are mediated along heterogeneous associations of humans and nonhumans. This is what John Law and others have called the “relational materiality” or the “semiotics of materiality” of the ANT approach(s). It is in this sense that science studies seeks to place itself within the “non-place” or the “black-box” which the modern settlement so readily produced by purifying the natural and social realms into opposite poles. The ANT theorist will now seek to trace out the multiple constellations of mediations that exist between the two

realms. That is, science studies seeks to follow the hybrid networks which transgress the fictional abyss opened up by the modern’s “Constitution.”

At the heart of [Actor/Actant-Network Theory] lies the radical suggestion that the modern dichotomies of society and nature, subjects and objects, realism and idealism were nothing more than a political settlement cemented into the philosophical and theological framework of the modern era.

This is not to suggest that the actor/actant-network style is incapable or unwilling to find stable and fully formed humans and nonhumans populating the world. This has been a concern raised amongst ANT’s critics that if all reality is merely the oscillating exchange of properties up and down networks of relationality, then nothing truly *is*.¹⁵ That is, *nothing* or *no one* is ever ontologically stable enough to constitute a particular and concrete being. All reality is thought to be reduced to a homogeneous whole. But certainly this is not the position argued by the ANT theorist. Instead, what the actor/actant-network style seeks to avoid is the black-boxing, or the obfuscating of relations once entities or network effects become stable. This has been the temptation in so much social, theological, philosophical and scientific theory. Once we have identified a stable entity—be it a person or thing, Robert Boyle’s vacuum, Louis Pasteur’s bacteria, holes in the ozone, or BSE causing prions—we quickly black-box, or make opaque, all the relations and agencies, humans and nonhumans, sometimes distant in both time and space, which have served to construct and sustain an entity in its particular being.

Now in order to further understand this “material relationality,” which is at the heart of the ANT approach, we will need to consider Latour’s position concerning technological mediation and scientific practice. For Latour the “essence of a technique” is to be found in “the mediation of the relations between people on the one hand and things and animals on the other.”¹⁶ In this sense, the linkages between humans and nonhumans cannot be understood unless we redefine the traditional *homo faber* myth



Article

Nature, Technology and the Imago Dei: Mediating the Nonhuman through the Practice of Science

Human sociality, as we know it, would be an impossibility if not for the multiplicity of nonhumans with whom we share our collectives. This is a point which, Latour argues, has largely been lost within mainstream sociology. And I would add, within mainstream theological anthropology.

of technological action. In this sense, techniques do not give us unmediated or unsocialized access to objective matter or nature that is “out there” beyond the social and subjective realm.¹⁷ Therefore, we must jettison the idea that techniques or artifacts are nothing more than the imposition of preplanned human “mental images” on an entirely passive and shapeless matter. For this traditional *homo faber* myth serves only to reinforce the mind-matter dualism which we reviewed earlier. Instead technological actions should be understood as the process of socializing nonhumans, or bringing nonhumans into our collective existence as full social actors.¹⁸

In the past, scientific practice was rationalized by stressing the two extremities of Mind “inside” and World “out there.” Once again we are reminded of the traditional understanding of the *imago Dei* as internal and disembodied rationality—or a “brain-in-a-vat” as it is sometimes called. But now armed with an understanding of technological action as the folding of human and non-human properties, scientific practice may take on a very different locus. Through the detailed study of scientific practice, “the humble instruments, tools, visualization skills, writing practices, focusing techniques, and what has been called ‘re-presentation’” now occupy the middle ground which the moderns made opaque with their dichotomization of the realms of Nature and Society.¹⁹ Never does scientific knowledge come to our minds unmediated as if by mere contemplation. Knowledge instead is mediated through a cascade of techniques, inscriptions, and instruments. That is, it is *materially* mediated. And material mediation is what the sciences are so wonderfully good at carrying out with great precision.

It is through the technological and material mediation of the sciences that the “gap”—posited by the moderns and their dichotomizing Constitution—between representing mind and the represented world is bridged, and the world comes to us, and is incorporated into our collectives, and ultimately becomes more *real*. But as Latour reminds us: “We should never take our eyes off the material weight of this action.”²⁰ We should never allow ourselves to forget the millions of mundane nonhuman artifacts which are the lifeblood of the sciences and

social stability as a whole. For it is one of ANT’s central claims that technology is society made stable in space and through time.²¹ Human sociality, as we know it, would be an impossibility if not for the multiplicity of nonhumans with whom we share our collectives. This is a point which, Latour argues, has largely been lost within mainstream sociology. And I would add, within mainstream theological anthropology.

Conclusion

The purpose of this paper has been to encourage dialogue between Christian scholars and the growing field of science and technology studies. Many Christian scholars, it seems, have grown all together too defensive in the face of what are thought to be “post-modern,” “relativist,” or “social constructivist” approaches to the philosophy of science, or the sociology of knowledge.²² In fact, Latour often has been the recipient of these charges, but seldom with sufficient cause. To label Latour’s work as “postmodern” is at best misleading. As Steven C. Ward has remarked, Latour’s work represents an “attempt to offer a view of science that is void of both modern realist optimism and post-modern relativist pessimism. As such, it is neither a realist vindication of the progress of science or an antirealist denigration of all foundations.”²³

It is similarly misleading to characterize ANT, but specifically Latour’s employment of the style, as adhering to a “social constructivist” account of scientific knowledge. Although Latour will himself describe his approach as being one that is “constructivist,” this is a far different constructivism to what is commonly implied by the terms “social construction.” Latour recently has proposed the term “compositionism” to get away from the “social” connotations now indelibly adhered to the term “construction.”²⁴ For the ANT theorist, knowledge *is* constructed. It is composed of heterogeneous networks populated with numerous human and nonhuman actants. But never are these compositions to be viewed solely in “social” terms.

Finally, I would like to make clear that my purpose here is not to suggest that Christian theologians should adopt ANT or Latour’s wider body of work uncritically. In

fact, there are a number of points where the critique could be effectively turned around, as it is surprising how often Latour's work ventures into questions that require theological reflection.²⁵ For instance, one can find peppered throughout Latour's work a certain interest in a pantheistic understanding of the God-world relationship, drawn largely from a Whitheadian or process understanding of God's interaction with the creation.²⁶ A pantheistic vision, of course, would be antithetical to much of the recent Trinitarian thought which takes as one of its central concerns the preservation of otherness-in-relation between Creator and creation. And this is just one of several points where Trinitarian theology can speak to the Latourian project with great effectiveness.

But to conclude what has been an all too brief summarization of the ANT approach, we may still discern a clear similarity with the relational ontology now popular in Trinitarian theology. In actor/actant-network theory, the *being, substance, or essence* of an entity does not precede its networked relations. This is a point very similar to that of the Cappadocian fathers who found God's being to be the result, or the outgrowth, of the ontologically prior relations amongst the three persons of the Trinity. Yet unlike the relational anthropologies we reviewed earlier, the actor/actant-network approach does not limit *actancy* to human actors alone. Action is always a relational achievement amongst both humans and nonhumans. Moreover, in the ANT approach, human being and human sociality are impossibilities without the multiplicity of socialized nonhumans who mediate relations and lend stability to human sociality. Latour, and ANT as a whole, have fundamentally questioned the ability of humans to be persons without the multiplicity of nonhumans with whom we share our collective existence. This is a point to which I believe Trinitarian theologians must now give deep consideration. ♦

Acknowledgment

The author would like to acknowledge the Calvin College Seminars in Christian Scholarship program, Christian Environmentalism With/Out Boundaries: Living as Part of God's Good Earth (Summer 2003) and the support of the Baylor University Horizons Grant Program. Additional funding was received from the Council for Christian College & Universities (CCCU) Initiative Grants to Network Christian Scholars project, *Living as Part of God's Good Earth*.

Notes

¹F. LeRon Shults, *Reforming Theological Anthropology: After the Philosophical Turn to Relationality* (Grand Rapids, MI: Eerdmans, 2003); Christoph Schwöbel and Colin E. Gunton, eds., *Persons, Divine and Human: King's College Essays in Theological Anthropology* (Edinburgh: T&T Clark, 1991); David A. S. Ferguson, "Towards a Theology of the Personal," in *The Presumption of Presence: Christ, Church and Culture in the Academy. Essays in Honor of D. W. D. Shaw,*

Peter McEnhill and George B. Hall (Edinburgh: Scottish Academic Press, 1996).

²Colin E. Gunton, "Trinity, Ontology and Anthropology: Towards a Renewal of the Doctrine of the *Imago Dei*," in *Persons, Divine and Human*, 48.

³Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999), 6.

⁴Recent examples of this relational approach to theological anthropology include John D. Zizioulas, *Being as Communion: Studies in Personhood and the Church* (New York: St Vladimir's Press, 1985); Douglas John Hall, *Imaging God: Dominion as Stewardship* (Grand Rapids, MI: Eerdmans, 1986); and Miroslav Volf, "The Trinity is Our Social Program: The Doctrine of the Trinity and the Shape of Social Engagement," *Modern Theology* 14, no. 3 (July 1998). For an overview of the philosophical and theological precursors to the trend, see Shults, *Reforming Theological Anthropology*.

⁵Zizioulas, *Being as Communion*; —, "On Being a Person: Towards an Ontology of Personhood," in *Persons, Divine and Human*.

⁶Gunton has adopted this terminology and much of his own theology of mediation from Irenaeus of Lyon. See, for instance, Colin E. Gunton, *The Triune Creator: A Historical and Systematic Study* (Edinburgh: Edinburgh University Press, 1996), 54.

⁷—, "Trinity, Ontology and Anthropology," 58–9.

⁸*Ibid.*, 60. For Gunton, the nonhuman (in his terms "non-personal") creation depends upon the human (personal) creation in order to fulfill its destiny of praising the Creator. Referencing Rom. 8:19, Gunton argues that the nonhuman creation "requires persons [humans] in order to be itself" (p. 56). It is through our participation in the divine image that we are capable of participating in this perfecting of creation and offering it in praise to the Creator.

⁹Christoph Schwöbel, "Human Being as Relational Being: Twelve Theses for a Christian Anthropology," in *Persons, Divine and Human*, 141–65.

¹⁰Edward Russell, "Reconsidering Relational Anthropology: A Critical Assessment of John Zizioulas's Theological Anthropology," *International Journal of Systematic Theology* 5, no. 2 (July 2003). Russell takes particular issue with Zizioulas's tendency to diminish what he calls the "biological being" of the human person.

¹¹Latour has recently suggested that the name Actor-Network Theory is misleading on many levels and has instead recommended that "actant-rhizome ontology" may be a better-suited namesake. See Latour, "On Recalling ANT," in *Actor Network Theory and After*, John Law and John Hassard (Oxford: Blackwell, 1999), 19.

¹²John Law, "After ANT: Complexity, Naming and Topology," in *Actor Network Theory and After*, 3.

¹³Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (New York and London: Pearson Education Ltd., 1993).

¹⁴For more on this important claim, see Bruno Latour, "Where are the Missing Masses? The Sociology of a Few Mundane Artifacts," in *Shaping Technology/Building Society: Studies in Sociotechnical Change*, Wiebe E. Bijker and John Law (Cambridge, MA: MIT Press, 1992); —, "Technology is Society Made Durable," in *A Sociology of Monsters: Essays on Power, Technology and Domination, Sociological Review Monograph* 38, John Law (London and New York: Routledge, 1991).

¹⁵Nick Lee and Steve Brown, "Otherness and the Actor Network: The Undiscovered Continent," *American Behavioral Scientist* 37 (1994).

¹⁶Bruno Latour, "A Door Must be Either Open or Shut: A Little Philosophy of Techniques," in *Technology and the Politics of Knowledge*, Andrew Feenberg and Alistair Hannay (Bloomington, IN: Indiana University Press, 1995), 272.

¹⁷—, "Pragmatogonies: A Mythical Account of How Humans and Nonhumans Swap Properties," *American Behavioral Scientist* 37 (1994): 2.

¹⁸But we must also recognize, as Latour argues, that human artifice always escapes us. Rarely, if ever, do we directly impress our "internal" mental image onto passive matter. The nonhuman materials which are necessary to technical action always participate in their own making. The material is, in a sense, a co-creator,

Article

Nature, Technology and the Imago Dei: Mediating the Nonhuman through the Practice of Science

a co-agent in the process of making. We humans simply do not act on our own as if by *creatio ex nihilo*. See Latour, "Pragmatogonies."

¹⁹Bruno Latour, "How to be Iconophilia in Art, Science and Religion," in *Picturing Science-Producing Art*, Caroline A. Jones and Peter Galison (New York and London: Routledge, 1998), 2.

²⁰_____, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999), 49.

²¹_____, "Technology is Society Made Durable."

²²To varying degrees the following recent articles have expressed something of this concern although without mentioning Latour's work specifically: Kennell J. Touryan, "Are Truth Claims in Science Socially Constructed?" *Perspectives in Science and Christian Faith* 51, no. 2 (1999): 102-7; John L. Taylor, "The Post Modern Attack on Scientific Realism," *Science and Christian Belief* 14 (2002): 99-106; Donald A. Carson, "Maintaining Scientific and Christian Truth in a Postmodern World," *Science and Christian Belief* 14 (2002): 107-22.

²³Steven C. Ward, *Reconfiguring Truth: Postmodernism, Science Studies, and the Search for a New Model of Knowledge* (New York: Rowman & Littlefield, 1996), 133.

²⁴Bruno Latour, "The Promises of Constructivism," in *Chasing Technoscience*, Don Ihde and Evan Selinger (Bloomington, IN: Indiana University Press, 2003), 40.

²⁵These intermittent reflections on theological ponderings become less surprising when one considers that Latour began his academic career as a student of biblical exegesis before moving on to sociology and science studies.

²⁶See, for instance, Latour's "Whitheadian" claim that God is overtaken by "His Creation" *Pandora's Hope*, 283. Suggestions of a "God of below" approach to the God-world relationship can also be found throughout *We Have Never Been Modern* (p. 77), but also in Latour's *War of the Worlds: What about Peace?* trans. Charlotte Bigg, ed. John Tresch (Chicago: Prickly Paradigm Press, 2002).

News Release

Randall D. Isaac Accepts Directorship of the American Scientific Affiliation



RANDALL D. ISAAC

The ASA is pleased to announce the appointment of its new executive director, Randall D. Isaac.

Randy has a wealth of experience as a manager, most recently as IBM Research Vice President of Systems, Science, and Technology.

An ASA member since 1976 and an ASA fellow since 1996,

Randy is committed to the integration of science and theology.

On February 1, 2005, Randy began volunteer, part-time duties. He assumes full-time responsibilities August 1, 2005. Randy can be reached by email: Randy@asa3.org

Welcome, Randy!

BOOKS RECEIVED AND AVAILABLE FOR REVIEW

Contact the book review editor if you would like to review one of these books. Please choose alternate selections. Richard Ruble, Book Review Editor, *Perspectives on Science and Christian Faith*, 212 Western Hills Drive, Siloam Springs, AR 72761. **New e-mail address:** richardanne@cox-internet.com

Nigel Barber, *Kindness in a Cruel World: The Evolution of Altruism*, Prometheus Books, 415 pages, 2004

William Cleary, *Prayers to an Evolutionary God*, Skylight Paths, 182 pages, 2004

Michael Guillen, *Can a Smart Person Believe in God?* Nelson Books, 165 pages, 2004

William Hutton and Jonathan Eagle, *Earth's Catastrophic Past and Future: A Scientific Analysis of Information Channeled by Edgar Cayce*, Universal Publishers, 572 pages, 2004

G. D. Kaufman, *In the Beginning ... Creativity*, Fortress Press, 152 pages, 2004

Alan Lightman, *A Sense of the Mysterious: Science and the Human Spirit*, Pantheon Press, 210 pages, 2005

Marvin Lubenow, *Bones of Contention: A Creationist Assessment of Human Fossils*, Baker Books, 400 pages, 2004

Michael Mallery, *Our Improbably Universe: A Physicist Considers How We Got Here*, Thunder's Mouth Press, 227 pages, 2004

Peter Russell, *From Science to God: A Physicist's Journey into the Mystery of Consciousness*, New World Library, 130 pages, 2005

E. C. Scott, *Evolution vs. Creationism: An Introduction*, Greenwood Publishing Group, 272 pages, 2004

Russell Stannard, *Science and the Renewal of Belief*, Templeton Foundation Press, 228 pages, 2004

Mikael Stenmark, *How to Relate Science and Religion*, Eerdmans, 290 pages, 2004

Richard Thompson, *God and Science: Divine Causation and the Laws of Nature*, Govardhan Hill Publishing, 216 pages, 2004

Edward Wilson, *On Human Nature*, Harvard University Press, 260 pages, 2004

Adopting a new notion of the imago Dei meant in the same breath an increasing of the body's ennoblement. Its most famous paradigm is the stigmata wonder of Saint Francis of Assisi. As a consequence of the new importance assigned to human corporeity, the bodies of virtuous persons become worth being represented. The philosophical concept of the imago Dei in Scholasticism. The human condition as a body and soul unity. The human body as a trace and reference to the imago Dei. It is all the more surprising, that a new variation of resemblance through a trace occurs at this point. God himself is not the reference point for the trace, but rather the image of God within the soul " which expresses itself [in the body, author's note] " due to its trace resemblance with the latter. Key words: Natural Sciences, Humanities, Interdisciplinarity, Knowledge, Science Matters. INTRODUCTION All earnest and honest human quests for knowledge are efforts to understand Nature, which includes both human and nonhuman systems, the objects of study in science. Thus, broadly speaking, all these quests are in the science domain. The methods and tools may be different; for example, the literary people use mainly their bodily sensors and their brain as the information processor, while natural scientists may use, in addition Science and Technology Studies and an Engaged Program 17 The Handbook of Science and Technology between the more "theoretical" and the more "activist" sides to STS, but there are plenty of Science and Technology Studies and an Engaged Program 19 The Handbook of Science and Technology Studies The become common to study the interactions of science, technology, and public interests. Consequently, the nature of the politics of science and technology appears to be at the very center of the field. Recent... The latter include divisions of subject and object, human and nonhuman, nature and culture, and relatedly, same and other, us and them. Feminist scholars mapping the data, the analyst constructs the situation of inquiry empirically.