Food Today

with Pat Bennett, "Turning Stones into Bread: Developing Synergistic Science/Religion Approaches to the World Food Crisis"; Varadaraja V. Raman, "Food: Its Many Aspects in Science, Religion, and Culture"; A. Whitney Sanford, "Why We Need Religion to Solve the World Food Crisis"; and Steven M. Finn, "Valuing Our Food: Minimizing Waste and Optimizing Resources."

TURNING STONES INTO BREAD: DEVELOPING SYNERGISTIC SCIENCE/RELIGION APPROACHES TO THE WORLD FOOD CRISIS

by Pat Bennett

Abstract. The Institute on Religion in an Age of Science (IRAS) has a long history of delivering conferences addressing topics of interest in the field of science and religion. The following papers from the 2013 summer conference on "The Scientific, Spiritual, and Moral Challenges in Solving the World Food Crisis" are, in keeping with the eclectic nature of these conferences, very different in content and approach. Such differences underline the challenges of synergistically combining scientific and religious insights to increase understanding of global problems and their possible solutions. This in turn reflects deeper questions about the purpose and nature of the science/religion dialogue. These papers suggest various ways in which the two perspectives can be combined in the pursuit of building better understandings of food-related issues, as well as highlighting difficulties and limitations which need to be addressed if the fruits of such dialogue are to make a wider impact. As such they serve as useful pointers for how this type of science/religion interaction might be further developed and deployed.

Keywords: Ralph Wendell Burhoe; connection; food waste; global food crisis; IRAS; relationality; religious paradigms; science/religion dialogue; synergism; J. Wentzel van Huyssteen

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A glimpse at IRAS conference titles of the last 60 years (http://www.iras.org/pastconferences.html) reveals a dialogical trajectory in which growing understandings of evolution, morality, sexuality, emergence, autonomy,

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and so on, in combination with advancing technological revolutions, have gradually refined and developed the initial "big themes" of the nature and condition of humanity, of good and evil and of truth, and of the nature and origin of religion and the role which it plays in society. While at first pass this might seem to suggest a project whose primary aim has been to tease out the implications for religion of advances in scientific understandings, such a reading does not do full justice to the vision of Ralph Burhoe (see Hefner 2014) which inspired and underpinned the foundation of both IRAS and *Zygon*. As the "Statement of Perspective" inside the cover of every issue of *Zygon* indicates, this vision was to explore ways of uniting the "well-winnowed wisdom" evolved by "long-standing religions," with significant advances in scientific understandings so as to provide "effective and valid guidance for enhancing human life."

However, the field of science-and-religion has always been marked by a variety of tensions—indeed there is an ongoing debate as to whether and how it even constitutes a distinct academic discipline (Gregersen 2014, 420–21). Not surprisingly then, Burhoe's has not been the only, or even the most dominant, understanding of either the nature of the task or the best way to pursue it. Indeed the primary locus of engagement between science and religion has, following Ian Barbour's seminal work (1966), been centered more around religious discourse as claims about reality (Drees 2010, 61), with critical realism being the methodological mainstay. Within this framework, the most prominent dialogical cluster has been around the nexus of causality, dealing with areas such as cosmic origins, evolution, special and general divine action, and their attendant issues. Unsurprisingly perhaps, the output from such dialogue has mainly taken the form of one of various types of personal or inter/intra-community apologetics (Drees 2010, 12–37; Bennett 2012, 193). However, as the vision statements of both *Zygon* and *Theology and Science* make clear, the construction of apologetics, despite its predominance and however sophisticated its form, is not seen as exhausting the inherent possibilities of science/religion engagement. Recent attempts to clarify the basic nature of the debates (Drees 2010) reframe the ground of engagement (Hefner et al. 2010, 419–522), reconceptualize elements and their connections (Gregersen 2014), and re-imagine methodological approaches (Gregersen and van Huyssteen 1998; van Huyssteen 1999), testifying to an ongoing apprehension of the need to find ways to more fully inhabit the latent potential of the field.

Against this background, the cluster of recent IRAS conferences examining specific global challenges (and implicitly whether and how a combined science/religion approach can contribute in a synergistic way to understanding and addressing them) can be seen as move back toward the type of "yoking" envisaged by Burhoe, with its aim of "reunit[ing] the split team, values and knowledge" to enable them to "pull together" wherever

necessary for the maintenance of a "viable dynamics of human culture" (Burhoe 1966, 1). However, they also highlight some of the difficulties associated with the approach, raising further questions (again rooted in the deep tensions underlying the dialogue) about the division implied by Burhoe and enshrined in the oft-quoted aphorism that religion asks *"why?"* and science asks *"how?"* Does this, or Sacks' more elegant formulation that "Science takes things apart to see how they work. Religion puts things together to see what they mean" (Sacks 2011, 2), do full justice to the matter? Or can religion, and more specifically theology (as its academic voice), contribute to expanding knowledge about *how* (and why) the world works as it does?

Furthermore, can it do this in such a way that any understandings arising from synergistic work between science and theology would be seen as rationally defensible and acceptable contributions to knowledge by those *outside* the dedicated disciplinary sphere? Opinions as to the health and wider impact of the science/religion field may vary (Browning 2007, 821; Drees 2010, 2), but it is inarguable that building on material which either depends on appeal to privileged religious sources or the necessity of concomitant assent to specific religious propositions will always encounter difficulties in gaining a more universal acceptance. Thus if the field of science/religion is to make its fullest contribution to attempts to understand and respond to the global crises we face concerning climate, energy, population, food, water, warfare, and so on, it needs to consider how to manage its own dialogue on these subjects so as not to circumscribe its reach or exclude itself from the wider conversation. It is beyond the scope of this introduction to explore these issues in any depth, but a brief overview of the papers suggests various possibilities—none of which are mutually exclusive and none of which devalue or displace other methodologies—for how the theological contributions to this type of dialogue might be approached so as to address some of these concerns.

Food—the getting, consuming, and becoming of it—is an inescapable feature of life, the whole of nature being, in William Inge's neat description (1926, 56), a "conjugation of the verb to eat in the active and the passive." While we humans may gloss over the third element of the triad, there is no denying the central role occupied by food in human culture and in "Food: Its Many Aspects in Science, Religion, and Culture"—a paper based on his conference Chapel Talks—Varadaraja Raman presents an eloquent extended reflection on the aesthetic, experiential, cultural, and religious aspects of food. In the course of this, he examines how humans fit into food webs and pyramids and muses on the role which getting food has played in the foundations and development of human culture, technology, and trade. He also considers how this quest for food has contributed to a fundamental, ongoing, and possibly irreversible transformation of the planet which we inhabit. What Raman's paper presents us with is

a kaleidoscopic panorama of how food and our behavior relating to it anchors us and weaves us—inevitably and irresistibly—into a complex web of multiple connection with both our fellow humans and the wider world: the way we eat represents "our most profound engagement with the natural world" (Pollan 2011, 10).

Whitney Sanford's contribution also draws on the fact that connectedness is an integral part of the food narrative. In "Why We Need Religion to Solve the World Food Crisis," she argues that despite a lack of scholarly attention thus far, faith-based perspectives can provide illuminating alternative paradigms through which to assess various aspects of the production and consumption of food. Using the lens of relationality, she explores three sets of connections: that between the production of food and those who consume it; that between the language and metaphors we employ for food production and our relationship with the earth which produces it; and finally that between our needs and wants with respect to food, and between our own needs and wants and the needs of others for adequate nutrition. In each instance, Sanford argues that religious and faith-based perspectives offer holistic frameworks which integrate environmental, economic, and equitable aspects and concerns. She concludes by offering some concrete examples of U.S.-based sustainability-focused intentional communities which demonstrate that such possibilities can be actualized and enhance the quality of life at various levels.

The theme of connectedness and disconnectedness is also a strong thread weaving through the final paper. In this, Steven Finn considers the specific problem of global food waste, examining assorted aspects of the issue at different stages "from field to fork." While it may not figure so prominently in consumer consciousness or public discourse as other food-related problems, the sheer scale of the problem is, as the detailed documentation makes clear, truly staggering—with almost half of all food produced eventually being discarded. However, this is only part of the story and Finn also outlines both the implications of wastage on such a scale in a world where 860 million people are undernourished, and its contribution to environmental degradation and climate change. The net result is, in his words, a food system which is "a dysfunctional circle of immense proportion" and in which a serious disconnect now exists between humans and the value of their food. Having set out the various dimensions of the problem, he then argues that addressing these presents us with a variety of opportunities to simultaneously work toward a number of other important goals—for example, making inroads on obesity, reducing global hunger, building community, improving food security, protecting the environment, and fostering cooperation at national and global levels. Such moves are an important part of progressing toward sustainability and security as we face the challenge of feeding a projected 9 billion people by 2050.

Here then we have three papers addressing aspects of the global food crisis and each with a different level of focus—on the panoramic, the

pattern, and the particular. But despite these differences, they also share a common thread—that of connectedness. Not only has there always been an apprehension of the closest of links between humankind and the working of the land—and interestingly the Yahwist's description of the creation of humankind in Genesis has Adam formed very specifically from *arable* soil (Hiebert 1996, 32–6), but the production and consumption of food has, from the beginning, also involved the presence and development of increasingly vast connective webs between people themselves and between humans and the environment they inhabit and shape. Aside from the specific issues with which they deal then, these papers between them also bring into sharp focus the fact that what sits at the very heart of the food crisis are human attitudes and behaviors. And while science may be able to provide ingenious contributions toward solving some of the problems connected with food production, usage, and waste (e.g., Clark et al. 2013, 1625–31), altering our perceptions and behavior with respect to food (e.g., Whitehair, Shanklin, and Brannon 2013, 63–69) is an even more vital part of the process.

It is at this interface of understanding human motivation and action (or lack of it) that religion/theology can make a significant contribution—both summative and synergistic—with that of science toward understanding the causes and of, and developing responses to, aspects of the world food crisis. The claim that advances in neuroscience, particularly those in imaging techniques, will eventually allow us to understand (and thus modify) the basis of human behaviors and attitudes is increasingly commonplace. But while the images from dynamic brain scans are epistemically compelling—"they invite us to believe" (Roskies 2010, 214), the reality of interpreting them is inevitably more complex (see, for example, Logothetis 2008, 869–78; Seixas and Lima 2011, 1266–69; Klein 2012, 952–60 for outlines of just some of the issues) and thus a hiatus remains. However, religious traditions—which historically have concerned themselves with both *theos* and *anthrōpos*—are replete with deep insights into the nature of humanness and aspects of the human condition. Many of these deal with attitudes and patterns which are deeply implicated in issues central to the food crisis and can thus shine a light on them, or offer frameworks through which to evaluate and challenge them—as indeed Sanford's paper suggests. In the remainder of this introduction, I will refer specifically to the Judeo-Christian tradition within which I am myself located, but this does not of course imply that it is the sole repository of wisdom in this area.

Rather than being simply (and simplistically) understood as a matter of "divine revelation," such wisdom is rooted in, explored, developed, and conveyed through specific stories handed down in oral and written tradition. It also inhabits key themes running through the whole Testamental canon dealing with relational connection, salvation, health, and flourishing. Many of these stories and thematic sweeps have also been more formally debated and developed over the centuries through Talmudic,

Midrashic, and theological reflection (see, for example, MacDonald 2008; Freidenreich 2012, 411–33; Brueggemann 2013, 319–40). Given the central role which food plays as a medium for the expression and transmission of culture and communal identity (Freidenreich 2011, 4), and that agricultural concerns dominated the lives of those writing the texts, it is perhaps not surprising that many also themselves involve food in some way or other, and that it often plays a significant role in the downfall of key characters or even of whole nations (cf. Basil of Caesarea *Sermo de Renunciatione Saeculi:* Clarke 1925, 10). Such stories serve as vehicles for exploring ideas of the proper limits to human desire and consumption, and what happens when these boundaries are breached (Stone 2005, 23–45). They also explore themes of identity and community, and of how food reinforces these and establishes ideas of otherness and difference which then shape attitudes and behaviors (Freidenreich 2011). As such, they provide a source of rich insights—sifted, winnowed, and refined over time—into why we humans behave in the ways we do, and thus into how behavior might be modified.

To suggest insights based on primary religious texts and subsequent theological reflection as a key contribution to dialogue might seem to run counter to earlier comments on the need for careful selection of material if science/religion dialogue on global issues is to make a wider impact beyond the dedicated field. However, J. Wentzel van Huyssteen's work (1999) on a postfoundational concept of rationality offers a way forward in this regard. Van Huyssteen's reworking sees rationality not as an abstract concept but as a complex embodied set of practical evaluative skills operating across the domains of human enquiry and knowledge (rather than being the exclusive preserve of science). Such an understanding opens up the possibility of defending theology as a rational enterprise which can contribute to public (rather than just "religious") debate about, and understandings of, the workings of the world. In conjunction with the associated transversal space dialogical model (van Huyssteen 2006), it offers a strong template in two respects: first for selecting suitable textual and theological material for dialogue which can, while still retaining its distinctive character and experiential accountability, also be defended as rationally developed and epistemically responsible; and second for how this material can then be employed in interdisciplinary and, using a further development, in transversal dialogue (Bennett, in press). This latter dialogical approach in particular opens up the possibility of both summative and synergistic contributions to understandings of global issues and their possible solutions. Using van Huyssteen's approach to select appropriate material for such dialogue precludes the necessity for concomitant assent to specific religious propositions in order to accept the usefulness or validity of the proffered theological insights, and forestalls the possibility of a challenge that such material derives from privileged sources which are protected from critical examination. It thus allows a way for developing outputs from science/religion dialogue

which can have traction beyond the dedicated field, and hence for the possibility of this making a contribution to the wider dialogue around finding solutions to global problems.

To eat is, in Norman Wirzba's evocative description (2011, 4), "to be implicated in a vast, complex, interweaving set of life and death dramas in which we are only one character among many . . . [connected] to vast global trade networks and thus to biophysical and social worlds far beyond ourselves . . . [and participating] in regional, geographic histories and in biochemical processes that . . . defy our wildest imaginations and most thorough attempts at comprehension." Theological insights have much to offer—both by themselves and in dialogue with science—to unraveling and understanding these connections and how our behavior contributes to and impacts upon them. The kind of approach outlined above facilitates contributions at all three of the levels of analysis represented by the papers here; or viewing it in another framework (though both heuristics inevitably oversimplify a much more complex set of possibilities), to discussions of context, content, and causality. Thus, first theological insights can both contribute to and conjoin with scientific understandings to set out the multileveled contexts in which food-related issues must be considered. Second, food-related problems are complex and multifactorial, and theological input can help expand understandings of the social and cultural patterns and roots which shape and underlie behaviors and attitudes related to the use and abuse of food—for example, as a means of establishing identity and reinforcing otherness. Finally, the deep wisdom and insights distilled over the centuries within religious frameworks of exploration and thought can contribute significantly to developing a deeper understanding of *why* humans behave in certain ways and thus of how we might more successfully facilitate the deep changes in attitude and action which are vital to tackling a whole range of food-related issues.

The interplay of religion and science is not only about refining our understanding of the workings of the world, but also of how we exist and act within that world (Drees 2013, 1). In the context of understanding current global crises and developing more effective responses to them, insights derived from religious/theological understandings can contribute to both arms of this enterprise and do so in a number of different ways in the context of science/religion dialogue. The usefulness of some of these will necessarily be restricted to those with a pre-commitment to a religious view of the world; however, others offer the possibility of more expansive understandings of issues and possibilities which can serve as contributions to the wider dialogue beyond the science/religion field. The path to this latter is beset with various complex challenges, but as anyone who has ever been involved in preparing and plowing a field, and then planting and protecting a young crop will know, stones can be seen simply as problems or transformed into tools to further the task. If the science/religion field is

to continue to develop and expand in ways which allow it to fulfill more of its latent potential, it needs to address these dialogical challenges and find a way of turning their stones into bread.

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