Aspects of the Sacred
Exploring Common Ground in Science and Religion

Proposal for

Global Network Initiative Catalyst Grant Program

In association with

Contents

Project Overview

Description of Proposed Project

Aspects of the Sacred (AoS) explores the past and present connections between spirituality and science. Its goal is to reach beyond the traditional boundaries that separate religion, academia, science, and technology. By doing so, AoS expects to find new applications for ideas of the "sacred." The links between the spiritual and the technical realms can broaden academic and professional disciplines.

Representatives of several institutions and professions drive *Aspects of the Sacred*. These individuals have experience in theology, history, philosophy, communications, complexity science, humanities, mythology, archaeology and organization behavior and development. Thus, AoS will form a comprehensive study of the "sacred" and its relationship within and outside of these disciplines. A long-term goal is to apply the results of this transdisciplinary analysis to the individual disciplines and beyond. The institutions represented are Florida Gulf Coast University, Nova Southeastern University, SUNY at Oswego, University of Maryland (University College), the NTL Institute, and the Center for Sacred Unity.

The project team anticipates expenses approximating $12,000 per year for the first year. Expenses and output will increase progressively over the next two years, as the "Budget" section below outlines. Income from work products such as books, articles and DVDs will help sustain the project beyond this initial term along with the continued interest of team members, students and other participants.

Three-Year Budget

The table below outlines the proposed costs and budget of the project. The team will review and manage the budget on a quarterly and yearly basis and make adjustments for any surplus or deficit of funds or costs. The team expects to increase funding from other sources over time, with a goal of sustaining the project for a longer term. For more details, see the "Cost Effectiveness Narrative" below.

Table 1: *Aspects of the Sacred* budget outline

Sources of funds	Year 1	Year 2	Year 3
Project grant	$10,000	$10,000	$10,000
Other resources (estimated)	$2,000	$5,100	$8,200
Total sources	**$12,000**	**$15,100**	**$18,200**
Uses of funds	**Year 1**	**Year 2**	**Year 3**
Books	$500	$150	$150
Hardware and software	$1,500	$350	$350
Speakers	$2,000	$3,500	$4,000
Travel	$3,500	$3,500	$5,500
Advertising and publicity	$1,500	$1,600	$1,700
Website maintenance	$1,500	$500	$500
Social events	$500	$2,500	$2,000
Publication costs	$500	$2,000	$2,500
Media production	$500	$1,000	$1,500
Total uses	**$12,000**	**$15,100**	**$18,200**

Notes:

Years—represent fiscal years tied to academic years unless specified otherwise. Thus, the budget commences in July and ends in June.

Other resources—denote the expected contribution of the institutions hosting the conferences and any other funds the project can raise (book sales, contributions, registration fees, other grants).

Books—includes any journals, articles or other publications necessary to conduct project research not available from libraries or other sources. It also includes subscriptions to research databases not sponsored by institutions. The initial expenses will likely be greater than subsequent expenses.

Hardware and software—includes a dedicated machine for revision control of project documentation, a discussion forum, website drafting and related software. The team will use free software and hosting wherever feasible to keep this cost down. As with *books*, the startup expenses will likely be the greatest, with maintenance decreasing over time.

Speakers—entails direct expenses (such as honoraria and lodging) involved in bringing guest speakers on site for seminars, lectures and workshops. For interdisciplinary conferences and those held in cooperation with other institutions, this may include a keynote speaker as well as one specifically relevant to *Aspects of the Sacred*.

Travel—includes expenses such as airfare involved in conducting meetings, interviews or other research relevant to the project.

Advertising and publicity—includes any expenses related to increasing project visibility and securing audiences. This may involve advertising on websites, newsletters, and research journals. It also involves producing signs and flyers to promote conference dates and locations.

Website maintenance—includes contracted services related to maintaining an up-to-date presence for the project and its work products on the Internet. Again, the project will seek to secure volunteer services where possible.

Social events—include any expenses related to networking opportunities, such as conference room rental and catering for luncheons and receptions.

Publication costs—entail the expenses associated with bringing the output of the project to printed media. These costs should increase over time as more research comes to fruition.

Media production—entails the expenses associated with bringing the output of the project to non-printed media such as webcasts and DVDs.

Proposal Narrative

Themes

Aspects of the Sacred will study transdisciplinary themes in four broad areas. The exploration will concentrate on special topics within each area. A special focus will be the six links between the four sub-themes and the meaning of the study in a larger context.

Shamanism • Contemporary Religion • Complexity Science • Education
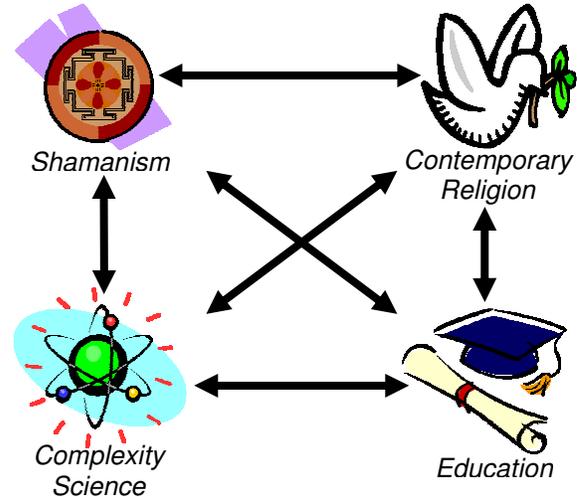
1. The Sacred in Shamanism

This area will study the origins and development of the cultural institution known as shamanism. It will investigate its worldwide distribution and try to ascertain whether it is indeed the same in its various manifestations. The connections between practices in shamanism and modern traditions may point toward common aspects of the sacred.

The study of shamanism will look at different aspects of the tradition, including the role of the shaman within different cultures. It will examine the shaman as healer, as intercessor between the human and divine realms, as psychopomp and in other roles. A review of landmark studies and recent investigations will determine whether the scholarship presents a consistent view of shamanism throughout history and across cultures.

2. The Sacred in Contemporary Religion

Our rapidly expanding knowledge about our universe and the way everything in it is interconnected invites us to name and affirm that living *in* the universe and living *in* God go hand in hand. *What* sustains, maintains, energizes, and connects everything that exists?

Scientists do their best to discover more about the "what." The more we learn from them the more we find ourselves in awe and wonder about ourselves as life forms giving the universe a way to reflect on itself.

In this theme, we will identify how religion now finds itself reflecting on the "what" also. It must do so because the "what," like "love," will be a significant pointer to the mystery that religion calls "God." This research will identify current thinking about describing "God" not as an elsewhere, overseeing deity, but as a *presence* permeating everything that exists.

3. The Sacred in Complexity Science

Complexity scientists focus on understanding how relationships, interactions, small experiments, and rules shape emerging patterns in unpredictable situations. At the core of complexity science is the assumption that the richness and diversity in our evolving universe has emerged from self-organizing processes that produce order from the initial chaos. In self-organizing human systems,

change occurs as the results of small local, personal interactions. Small changes integrate and scale themselves throughout larger systems and processes.

This theme will explore the application of complexity methods for understanding how the uncertainty of emergence can help us relate to the sacred in our lives.

Accepting the reality of emergence and self-organization and the accompanying assumptions that go with it challenges both religion and science. Two sets of assumptions are required to explain events in the universe. One familiar set is linear and deterministic. The other set of assumptions is emergent and self-organizing. Developing awareness of the sacred requires us to embrace both sets of assumptions and embrace the constant creative process in the universe. Each day, we take in the wonder of creation and we give out our time and attention to what matters to us.

4.   The Sacred in Education

This examination of the sacredness of everyday experiences will contribute to improving teaching practices in science, technology, and mathematics education. The increasing crisis in dropout rates underscores the problem. Our educational systems focus narrowly on content. They have disconnected the act of teaching from the greater need to help students generate a unified and consistent understanding of how nature works. This theme draws on a variety of educational theories to explain how sacredness connects to us through the science, technology, and mathematics that pervades our everyday lives.

5.   Transdisciplinary Questions

This investigation will focus on integration points with other disciplines by exploring the following six intersections:

- *Shamanism and education*: What guides are required to develop awareness of the sacred? Can a person be his or her own shaman? How does a greater understanding of nature aid in teaching practices? Is there a connection between the shaman as storyteller/artist and the modern educator?

- *Shamanism and contemporary religion*: How has shamanism transformed or given way to polytheism and ultimately modern religions? How has it managed to stay the same in regions where shamanism still exists? What are the shamanistic roots still present in Eastern traditions, Western religions, and philosophies? Do "neopagan" faiths maintain any continuity with older shamanistic rituals? Are there connections between practices in shamanism and modern traditions that point toward common aspects of the sacred?

- *Shamanism and complexity science*: Are there connections between shamans and technological "gurus"? As mediators between realms, do shamans and complexity systems theorists share common traits? Do these associations suggest larger connections between the physical and the metaphysical?

- *Contemporary religion and complexity science*: How are religious concepts and phenomena enhanced by complexity science perspectives? Does increasing uncertainty

(moving to the "edge of chaos") increase a person's awareness of the sacred? How does a greater understanding of emergence affect the various faith traditions?

- *Complexity science and education*: How does knowledge of and application of complexity thinking and methods add value to the sacred as part of teaching? How can educational systems incorporate this perspective into instructional methods?

- *Contemporary religion and education*: How does the emerging view of God as a "presence" that is everywhere help with everyday encounters with the sacred? How does seeing the sacred as an integral part of one's work affect belief systems?

Goals and Benefits

Aspects of the Sacred will lend itself well to a series of conferences and publications of proceedings. Ultimately, the study aims to increase awareness by way of websites, recorded media, and other mass communication efforts.

- Goal 1: A series of informative conferences will take place in Florida (Ft. Myers and Ft. Lauderdale), New York (Oswego), and the Washington, DC area.

- Key benefit 1: The conferences will provide benefits in the form of interviews and other material that will assist ongoing research. The conferences will also increase awareness among students, faculty, and members of the public, including possible sponsors.

- Goal 2: The project team will publish the results of their research in books or journals.

- Key benefit 2: Publications will increase awareness further, particularly in academic circles. They may also generate income to offset project costs and sustain long-term viability.

- Goal 3: The study aims to produce websites, webcasts, DVDs, and other media.

- Key benefit 3: These and other mass communication efforts will spread awareness to a global market beyond local and academic circles.

Project Plan

Much of the project work will consist of transdisciplinary research and activities designed to promote this research. The table below shows detailed information on the expected timetable for the project. The project comprises three phases by year, with an approximate schedule for each phase. Where appropriate, the project will attempt to involve other groups from the Global Network Initiative and elsewhere.

Table 2: *Aspects of the Sacred* project plan outline

Phase	Description of Work	Start and End Dates
Year 1	Draft grant proposal	January 2009
(2009-2010)	Submit grant proposal	February 2009
	Receive grant decision and finalize project details	March-June 2009
	Obtain initial resources	July 2009
	Introduce project at institutions	August 2009
	Conduct initial research	September-December 2009
	Draft and publish initial website	January-February 2010
	Plan first conferences (Ft. Myers, FL)	March-April 2010
	Hold first conferences	May 2010
	Summarize conference proceedings	May-June 2010
	Evaluate next steps for phase 2	June 2010
Year 2	Conduct ongoing research	July-August 2010
(2010-2011)	Plan second conference (Ft. Lauderdale, FL)	September 2010
	Hold second conference	October 2010
	Summarize conference proceedings	November 2010
	Prepare research for publication	December 2010
	Publish preliminary research	January-February 2011
	Plan third conference (Oswego, NY)	March 2011
	Hold third conference	April 2011
	Summarize conference proceedings	May 2011
	Evaluate next steps for phase 3	June 2011
Year 3	Conduct ongoing research	July-August 2011
(2011-2012)	Plan potential fourth conference	September 2011
	Hold fourth conference (Washington, DC)	October 2011
	Summarize conference proceedings	November 2011
	Prepare research for publication	December 2011
	Publish final research	January-February 2012
	Prepare DVD and other media	March 2012
	Produce DVD	April 2012
	Evaluate website and other media	May 2012
	Revise website and other media	June 2012
	Evaluate project and long-term viability	July 2012

Programs and Events

1. **Florida Gulf Coast University (FGCU)** will hold an academic meeting on *Aspects of the Sacred* in the spring that would coincide with the Annual Interdisciplinary Conference that FGCU has put on for the last two years. It would be a meeting of the researchers involved in the *Aspects of the Sacred* grant—an opportunity to present research and hold a working meeting. For that year, FGCU would choose a theme for the conference that would mesh thematically with the work done on the grant.

This academic meeting would provide an opportunity to create cross-disciplinary dialogue between the grant researchers and other academics working in related areas. Specifically, FGCU has faculty working in the areas of Environmental Humanities and Contemplative Practice. The conference would provide a space for integration between the research areas of the grant and existing research strengths of the FGCU faculty. FGCU will allocate some funds and in-kind resources to the meeting.

2. **The Center for Sacred Unity** will sponsor a conference of theologians and scientists to explore the status of science and religion. It will take place in conjunction with the FGCU conference, also in Ft. Myers, Florida. This forum will provide the researchers an opportunity to present their findings and receive feedback from scholars in both fields. Potential speakers and discussants include a variety of academicians, clergy and authors.

3. **Nova Southeastern University** will hold workshops dealing with shamanism, perhaps inviting one or more living shamans from Peru currently working with one of the NSU faculty members. If possible, the NSU team will also contact the Seminole Tribe of Florida. This may lead either to interviews or to on-site speaking prospects. The NSU researchers will organize a symposium in the second fiscal year of the project at NSU's Fort Lauderdale campus. The team will attempt to draw as much relevant interest as possible, interfacing with public organizations, other faculty, student interfaith organizations and other relevant groups.

4. **SUNY at Oswego** will participate in this grant by hosting a spring or summer conference on its campus. The university is situated on the shore of Lake Ontario and is a beautiful travel destination during the spring and summer months. The university has recently built a new state-of-the-art campus center that includes extensive modern conference facilities. Oswego State has ample resources to host a conference of this scale including a variety of meeting spaces, dining and on-campus lodging facilities. The focus of the conference will be on exploring aspects of the sacred with regard to working toward social justice.

5. **The NTL Institute of Applied Behavioral Science** will hold a symposium in the third year of the project to present findings that have broad implications for education policy, church-state relations and organizational leadership. The symposium will take place at NTL headquarters in Arlington, Virginia.

Reading Materials

Campbell, J. (1959). *The masks of God: Primitive mythology*. New York: Penguin.

Clayton, P. & Davies, P. (2006). *The re-emergence of emergence: The emergentist hypothesis from science to religion*. New York: Oxford University Press.

Davies, P. (2007). *The cosmic jackpot: Why our universe is just right for life*. New York: Houghton-Mifflin.

Eliade, M. (1951). *Shamanism: Archaic techniques of ecstasy*. W. R. Trask (Trans. 1964). New York: Bollingen Foundation.

Johnson, E. A. (2007). *Quest for the living God: Mapping frontiers in the theology of God*. New York: Continuum.

Kaufman, G. D. (2004). *In the beginning… creativity*. Minneapolis: Fortress Press.

Kauffman, S. A. (2008). *Reinventing the sacred: A new view of science, reason, and religion*. New York: Basic Books.

Melia, D. F. (1983). The Irish saint as shaman. *Pacific Coast Philology, 18*(1/2), 37-42. Retrieved January 5, 2009 from JSTOR: http://www.jstor.org/stable/1316639

Morwood, M. (2004). *From sand to solid ground: Questions of faith for modern Catholics*. New York: Crossroads Publishing.

Nelson, D. W. (2005). *Judaism, physics and God: Searching for sacred metaphors in a post-Einstein world*. Woodstock, VT: Jewish Lights Publishing.

Olson, E. E. (2009). *Keep the bathwater: Emergence of the sacred in science and religion*. Estero, FL: Island Sound Press.

Olson, E. E., & Eoyang, G. H. (2001). *Facilitating organization change: Lessons from complexity science*. San Francisco: Jossey-Bass/Pfeiffer.

Peters, K. E. (2008). *Spiritual transformations: Science, religion, and human becoming*. Minneapolis: Fortress.

Polkinghorne, J. (2005). *Exploring reality: The intertwining of science and religion*. New Haven: Yale University Press.

Riches, D. (1994). Shamanism: The key to religion. *Man, 29*(2), 381-405. Retrieved January 5, 2009 from JSTOR: http://www.jstor.org/stable/2804479

Senge, P., Scharmer, C. O., Jaworski, J., & Flowers, B. S. (2004). *Presence: Human purpose and the field of the future*. New York: Doubleday.

Wallis, R. J. (2000). Queer shamans: Autoarchaeology and neo-shamanism. *World Archaeology, 32*(2), 252-262. Retrieved January 5, 2009 from JSTOR: http://www.jstor.org/stable/827869

Young-Eisendrath, P. & Miller, M. E. (2000). *The psychology of mature spirituality: Integrity, wisdom, transcendence*. Philadelphia: Routledge.

Cost Effectiveness Narrative

The goal of *Aspects of the Sacred* is one of maximizing its resources to achieve the greatest possible impact. To this end, the team outlines the following four key features of its management strategy:

1. *Innovation*: The AoS project seeks to explore new dimensions rather than restating old received notions. The team will actively seek, acquire, and fuse together new areas of expertise outside traditional disciplines.

2. *Momentum*: The project will actively recruit new audiences and members and thus constantly generate ideas and motivation. The project will continuously seek out new networks and avenues for expanding its dialogue and communicating its findings.

3. *Adaptability*: The team will undertake capable management and adaptive strategies. AoS will seek to take advantage of new opportunities and leverage resources to the best of its ability while staying budgetary limits. The team will seek to increase project funding where feasible to attain new goals.

4. *Accountability*: AoS will take proactive measures to set goals, measure them, and attain them. The team will audit itself internally and seek external auditors to ensure effectiveness of its goals and its budget. The project requires multidimensional quantitative measures to track and ensure its success.

The *Aspects of the Sacred* project intends the catalyst grant to be just that: an impetus for future funding and a means of driving long-term viability and widespread awareness in the field.

Metrics

To measure and track its performance, the team proposes the following cost effectiveness metrics (adapted from *Optimizing program impact and cost-effectiveness* by C. L. Harper, Jr.). While these metrics are not necessarily set in stone, the team realizes the need for sufficient strategic thinking to measure the outcome of the study in several key areas. The project members also realize their motivation devoted to the project can and should vastly outweigh the money and talent contributed to it.

1. *Direct financial leverage* (DFL) is a measure of catalyst funds in proportion to total project funds. The team forecasts this metric to decrease over time, as the budget excerpt below illustrates. The team will consider the project's success in terms of its ability to fund itself from multiple sources beyond the catalyst grant.

2. *Indirect financial leverage* (IFL) is a measure of funds from other donors in proportion to initial catalyst funds. The team projects this metric to increase over time, thereby sustaining long-term project viability and return on investment (ROI). It also demonstrates the project's ability over time to generate new funding sources beyond the catalyst grant.

Table 3: Financial leverage (direct and indirect) in proportion to project budget

Sources of funds	Year 1	Year 2	Year 3
Project grant	$10,000	$10,000	$10,000
Other resources (estimated)	$2,000	$5,100	$8,200
Total sources	**$12,000**	**$15,100**	**$18,200**
Direct financial leverage	**83%**	**66%**	**55%**
Indirect financial leverage	**20%**	**51%**	**82%**

3. *Downstream imitative multiplication ratio* (DIMR) refers to potential derivative works due to involvement of opinion leaders in the project. The team will treat this metric as a ratio of external publications the project appears to influence in proportion to original project publications. The project expects this to rise over time as a measure of increasing awareness and academic distinction. This metric may be difficult to chart, but the team will analyze citations in various databases in an attempt to measure influence. Such citations include those in direct publications as well as media references and mentions in other scholarly and religious organizations.

   Example: the project produces two publications the first year with one "influenced" work appearing. The next year, it produces three works and five derivative publications appear, and the third year the ratio is four to seven. Therefore, DIMR = 50% (1/2) in 2009, 167% (5/3) in 2010, and 175% (7/4) in 2011.

4. *Cost per publication* (CPP) is a rough measure of project success in terms of its printed output. Publication estimate 1 below illustrates the conservative projection of publications in the example above. The team anticipates a more aggressive estimate of publications, reaching or exceeding the second estimate below. This metric illustrates both a decreasing cost over time and an increased return on investment.

Table 4: Cost per publication estimates

Sources of funds	Year 1	Year 2	Year 3
Project grant	$10,000	$10,000	$10,000
Other resources (estimated)	$2,000	$5,100	$8,200
Total sources	**$12,000**	**$15,100**	**$18,200**
Publication estimate 1	**2**	**3**	**4**
Cost per publication	**$6,000**	**$5,033**	**$4,550**
Publication estimate 2	**3**	**5**	**7**
Cost per publication	**$4,000**	**$3,020**	**$2,600**

5. *Cost per book sold* (CPBS) relates to the metric above, but projects actual publication sales rather than quantities produced. It measures total project expenses in proportion to the number of books sold.

The *Aspects of the Sacred* project intends to target much of its output toward high-volume publications as opposed to specialist low-volume publications. While the latter may be important to reach select audiences, articles published in specialist journals can often reach a wider audience.

To this end, the project team supports plain English practices. The team will avoid jargon, technical terms, and long sentences where simpler language will suffice. This will increase quality of the final product rather than sacrificing it. This will also allow the project to compete in the upper tier of the science and religion book market. The project aims to network with major publishers with strong marketing resources. The table below illustrates the team's ambitions with respect to this metric. Over time, the team expects book sales to increase along with project visibility. Potential publishers will thus find the CPBS progressively more attractive, with the ability to generate a high return on investment.

Table 5: Cost per book sold estimates

Sources of funds	Year 1	Year 2	Year 3
Project grant	$10,000	$10,000	$10,000
Other resources (estimated)	$2,000	$5,100	$8,200
Total sources	**$12,000**	**$15,100**	**$18,200**
Book-length productions	1	2	3
Number of books sold	2,500	10,000	30,000
Cost per book sold	**$4.80**	**$1.51**	**$0.61**

6. *Cost per impression* (CPI) measures the extent of outreach in various media and the potential to reach opinion leaders. It represents the project cost in proportion to the total media impressions it generates. "Impressions" in this sense includes total publication readership, conference attendance, website hits, and other references. As with other metrics, this aims toward increasing awareness and ROI over time.

Table 6: Cost per impression estimates

Sources of funds	Year 1	Year 2	Year 3
Project grant	$10,000	$10,000	$10,000
Other resources (estimated)	$2,000	$5,100	$8,200
Total sources	**$12,000**	**$15,100**	**$18,200**
Total media impressions	50,000	200,000	500,000
Cost per impression	**$0.24**	**$0.08**	**$0.04**

7. *Marker group opinion* (MGO) quantifies media impression impact further by assessing audience composition. This measurement will rely on polling before-and-after opinions of website visitors and conference attendees. Team members will work with other subject matter experts and surveyors to develop relevant polls. They expect an increase in favorable opinion toward the field after events and visits. The team anticipates a similar trend in

transforming perceptions (or "mainstreaming" project visions) over time. If feasible, faculty team members will work toward incorporating findings in new or existing courses, and poll students accordingly. The team will also seek to measure and gain conference attendees who are "new" to the subject areas.

Outreach and Advertising

In conjunction with these metrics, the team will seek to expand its audience wherever possible. Some outlets include public radio and local television shows. Team members may also secure speaking appointments at other conferences on similar subjects. They will pursue networking opportunities with student and institutional clubs devoted to spirituality and science. This may result in coordinating public events with such organizations.

The project will pursue an aggressive strategy in directing Internet traffic toward its own website and affiliated sites. Online publications will aim to optimize search engine placement by means of keyword targeting and similar strategies. If cost effective, the team will use software or services to advance these strategies. It may also join "webrings" to increase traffic. These will be collective sites devoted to the project's subject areas. As with other search engine strategies, the team will pursue only those of high quality and relevance with a potential of increasing traffic. The project will pursue these strategies without sacrificing content or quality.

AoS may adopt and allow selective advertising by other vendors on its site. It will choose such advertisers (such as Google AdSense) based on relevance, low visibility, and potential return. The project will use any income from such sources to offset its web development and advertising costs. When strategically practical, the team will prepare press releases to targeted media, institutions, websites and other channels to achieve maximum visibility.