

*When the brothers are cutting wood
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so that it might have hope of sprouting again.¹*

A Reflection on the Keystone XL Pipeline

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“God saw everything that he had made, and indeed, it was very good.” Gen. 1:31

A couple of years ago I had the privilege of experiencing the spectacular beauty and grandeur of the Canadian Rockies in Alberta, Canada for the first time. From the flowing bright green tall grasses of the plains at their base, the jagged light grey peaks thrust skyward leading the eye upward to their melting snowcaps, and on to the azure blue sky, dotted with cotton-ball-puffed clouds. In the most unexpected moments and to my delight I was treated to the magnificence of a waterfall cascading ice-cold ribbons of water hundreds of meters downward, forming whirlpools in the streams or rivers below. Later I hiked in Banff National Park, to the Hoodoos² Viewpoint, along Tunnel Mountain Road, and then on to Moraine Lake and Lake Louise. There the bright aqua waters mirrored the snowcapped mountains and gentle breezes wafted across the surface to the shores.

“...the whole creation has been groaning ...” Romans 8:22

But the next day, when circling northeastward toward St. Paul, taking the long route back to Calgary, the scenery shifted and revealed vistas of ecological destruction that were simply shattering! Huge tracts of land were being reduced to moonscapes because the “overburden” of water, soil, and ancient boreal forests – muskeg, peat, and sand – was ripped away – roots and all – and cast aside in heaps to expose the “**tar sands,**” the new “**black gold!**” My heart cried out at this Baconian disaster in progress!³ This damage will certainly impact the ecological health of this region for generations to come – to say nothing of the overall damage the release of the CO₂ will inflict on the planet by contributing to global warming.⁴

Imperial Ecology –V– Kinship of Creation

The irony is both tragic and profound! In contrast to the wisdom of St. Francis of Assisi, Francis Bacon (1561-1626) opened the door to this “imperial ecology.” Bacon held that humans are the lords and masters over nature. Technology was the means to that end. His writings are full of metaphors of torturous violence: nature was to be “bound into service,” “made a slave,”

“put under constraint,” “be squeezed and dissected” and “forced out of her natural state and molded” so that “human knowledge and human power meet as one.” Bacon believed that using science in this way would produce a “blessed race of heroes and supermen.”

Indeed, we humans have become *like* gods! We *have* gained “control” over the Earth! We *do know* the fundamental workings of the major systems of land, waters, and skies; indeed, *we are to blame* for many catastrophic events! But yet, we are like adolescents who lack moral wisdom, and we choose to ignore the harms our pillage inflicts, for the sake of the comforts of the “good life.” Yet in the depths of our beings, we know that “*we are responsible*”– and this drives us to ever more vicious cycles of denial and false hope.

Genuine –V – False Hope

In St. Francis’ day wood was quite central to medieval life in a way that fossil fuels are central to us. Without wood, medieval societies would have collapsed; if we removed all oil-based products from our homes, we’d have precious little left. But yet, Francis set forth a relationship that would sustain both people and trees in hope! This was a first and necessary step toward sustainable living! Indeed, the medieval ax devastated forests and harmed ecosystems. But today, the conditions of size, scale, and context of global warming create a distinct urgency Francis could have never known. Yet his call for hope is worth our consideration.

Francis was wise to point to hope, for hope makes all of life possible! The Bible is awash in symbols of hope. The First Testament points us away from political, economic, and military alliances that bring us false hope (Is. 31:1-3; 36:4-9; Hos. 10:13). Also in the First Testament God and hope are virtually identified: “God is the hope of Israel” (Jer. 14:8; Ps. 71:5). In the New Testament, God is a “God of hope” in whose presence we should “overflow with hope” (Rom. 15:13).

Jesus refers to all of this in his “Inaugural Address” in Lk 4:18-19. He specifically refers to Lev. 25: 23: “The land shall not be sold in perpetuity, for the land is *mine*; with me you are but aliens and tenants.” Key to genuine hope is a just and sustainable relationship with the land. Hope is tightly linked to the truth that *we* are not the owners of the land, or free to ravish it with unchecked license! Rather, only when we care for the land as God cares for us, reaching for a good that moves beyond ourselves, will we achieve joy and peace. When we try to buy hope and safety on the cheap, placing our own greed that satiates rather than provides sufficiency, we deceive ourselves into the false hope of finding happiness. We spiral downward into

insensitivity to the needs of others and the inability to respond to anything but our fears and insecurities. It is fear and insecurity (not hope) that is at the root of most destruction, violence, many mental illnesses; and fear has long been considered a classic impediment to sound moral judgment. When we listen to the reasons proponents of the Keystone XL Pipeline give for mining the tar sands and for bringing that crude through to the U.S. – fears loom large, along with attitudes of control and domination.⁵

St. Bonaventure of Bagnoregio

As a university theologian, St. Bonaventure of Bagnoregio developed what St. Francis of Assisi taught about Christ, creation, creatures, and humans.⁶ His love-oriented virtue ethics framework is known, as the *Imitatio Christi* – the following or imitation of Christ.⁷

Imitatio Christi and Virtue Ethics

The *imitatio Christi* has both an internal and external dimension. Humans are embodied and spiritual earthcreatures, who seek union with God, while in *this* world, which utterly bursts with the signs and wonders of God. Bonaventure says we can learn how to live morally by studying the whole life of Jesus, the Word incarnate, explained in the Gospels, and interpreted by St. Francis. Following Jesus takes us beyond merely mimicking his actions, to *spiritual* transformation. There is a constant interplay between our being and doing the good (ethical, external), and the process of our becoming good (spiritual, internal). In these two ways God’s grace assists in the moral life.⁸ Central to this transformation are the virtues of humility, poverty, obedience, and love.

Humility

Humility is the virtue central to the God-human relationship. The English word for “humility” comes from the Latin word for “earth” = *humus*. God, in the Incarnation, entered our reality, choosing intimate relationship with us *earthcreatures*.⁹ But clearly, we are *not* God! Today we must reclaim our *creaturely* identity and use our considerable, though limited scientific and technological prowess to care for one another and the planet.¹⁰

Humility is particularly important when contemplating massive and destructive projects such as the tar sands extractions and the Keystone XL pipeline.¹¹ As scientist R. Eugene Turner explains:

Embracing doubt, a signature of strength of science, is an essential core component of an Ignorance Based World View (IBWV) that assumes the areas of certainty are small and

relative. The contrasting Knowledge Based World View (KBWV) assumes small and mostly insignificant knowledge gaps exist. When the KBWV is combined with a sense of urgency to “do something,” then the intellectual landscape is flattened, the introduction of new ideas is impeded, monitoring and adaptive management is marginalized, risky behaviors continue, and social learning is restricted.¹²

Christian environmental ethics is normatively rooted in values that strongly embrace prudence and the precautionary principle when dealing with questions of great complexity, the unknown, or the unknowable. Thus, an IBWV approach is clearly the preferred methodology for the tar sands/ Keystone XL projects. The central value of the world as a sacramental universe requires upholding claims of the intrinsic *and* instrumental value of the Canadian boreal forests and watersheds, as well as U.S. farmlands, aquifers, and waterways. Moreover, the values of authentic development and sustainability require that the environmental impact of human constructions not endanger human life or unnecessarily wreck damage on the natural environment. Further, development of public policies and their enforcement that prevents destruction and limits vulnerability, thus securing public safety for all citizens without prejudice is demanded by the norms of justice, participation, and the preferential option for the poor.

It is precisely due to situations of this nature (as discussed above) that member states of the United Nations, UNESCO and the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) mandated the elaboration of the 2005 report on *The Precautionary Principle*.¹³ The Precautionary Principle deals with the complexities of economic activities that would exploit natural resources using technologies that could result in serious and/or irreversible harm¹⁴

The Precautionary Principle builds on the moral foundation of prior declarations for protecting human rights and natural resources. However, it goes beyond computing the consequences of pollution; it faces beforehand the possibility of unpredictable developments because of insufficient scientific knowledge. Its objective is to provide guidance in cases of risk where outcomes and probabilities are not well known. “The unquantified possibility of risk is sufficient to trigger the consideration of the Precautionary Principle. . . . Interventions are required before possible harm occurs, or before certainty about such harm can be achieved, that is, a wait-and-see-attitude as a strategy is excluded.”¹⁵

Poverty

Bonaventure held that material poverty (read Christian simplicity), must go hand in hand with humility. Many of us, materially wealthy people, know only a false poverty (material), the illusion of never having enough “stuff,” and always ultimately craving something more (spiritual poverty). Today, we must choose to live with what is sufficient for a life of dignity and that is ecologically sustainable! Key to the virtue of poverty is confidence in God’s generosity, being ready with open hands and heart, and as ready to give away, whatever we can to another in need (Mt 10:8). Today this means limiting our consumption of energy from unsustainable sources, and working to develop renewable energy sources and ways of sustainable living.

Obedience

“Obedience” comes from the Latin – *oboedire* = “to pay attention” or “to hear.” Jesus Christ modeled this virtue by listening to his Father’s will,¹⁶ and by caring for the needs of people and non-human others.¹⁷ Today, we must heed the groaning of the suffering Earth, become ecologically literate, engage in prayerful discernment, and then act to halt environmental destruction. There is an intimate relationship between the virtues of obedience and prudence. You cannot have one without the other!

Prudence is a classical virtue in Christian environmental ethics based on Aristotle’s *phronêsis*, or practical wisdom and found in the works of Thomas Aquinas.¹⁸ According to the *Catechism of the Catholic Church*, Article 7, §1806:

Prudence is the virtue that disposes practical reason to discern our true good in every circumstance and to choose the right means of achieving it ... Prudence is "right reason in action," (Aquinas, *STh* II-II,47,2). It is not to be confused with timidity or fear, nor with duplicity or dissimulation. ... it guides the other virtues by setting rule and measure. It ... immediately guides the judgment of conscience. The prudent man determines and directs his conduct in accordance with this judgment. With the help of this virtue we apply moral principles to particular cases without error and overcome doubts about the good to achieve and the evil to avoid.¹⁹

When prudence is used in environmental ethical analysis, it functions to conserve known values, while remaining open to new knowledge.²⁰ In the case of the Keystone XL pipeline, known values include the intrinsic value of the 1,300 miles of privately owned land and the 500 miles of prime farmland of the “breadbasket” of the U.S. (that the pipeline will traverse), as well as the

Yellowstone River and the Ogallala Aquifer, which provides roughly 30% of all the water used for irrigation on American farms. It is this very section of U.S. farm country that John Paul II spoke of in his Homily at Living History Farm, October 4, 1979 when he said:

... the land must be conserved with care since it is intended to be fruitful for generation upon generation. You who live in the heartland of America have been entrusted with some of the earth's best land: the soil so rich in minerals, the climate so favorable for producing bountiful crops, with fresh water and unpolluted air available all around you. You are stewards of some of the most important resources God has given to the world. Therefore conserve the land well, so that your children's children and generations after them will inherit an even richer land than was entrusted to you. But also remember what the heart of your vocation is. While it is true here that farming today provides an economic livelihood for the farmer, still it will always be more than an enterprise of profit-making. In farming, you cooperate with the Creator in the very sustenance of life on earth.²¹

In a time of global food insecurity, record climatic warming resulting from fossil fuel use, and the disastrous safety record of catastrophic oil spills from pipelines, prudence and obedience call for a halt to this entire project.²²

Love

Having first received God's love, humans then share it among themselves and with all of creation (Jn 13:34-35).²³ But, humans love imperfectly; so justice and the discipline of law is necessary. Christ is the ultimate norm and negotiator of justice (love).²⁴ Today we must relate with the non-human world with justice and love as God relates to us. Today we must create and enforce policies and laws that keep air, water, and soils pure; that sharply restrict the plundering of the planet; and that support the restoration of environmental damage.²⁵ Or, as a World Council of Churches poster puts it, "Love your neighbor. Halt global warming!"

Imitatio Christi: Virtue Ethics, Tar Sands, Keystone Pipeline & Global Warming

Like St. Francis of Assisi, Bonaventure held a hope-filled, positive, and radically relational view of God, creation, redemption, and ethical praxis.²⁶ Each creature responds to God's love in its unique way. The incarnation unites humans with the whole cosmos, and Jesus Christ incarnate, embodies and exemplifies the norm and standard for all ethical relations

Humans, can read the signs of the divine in creation, and then *act* morally.²⁷ By following Jesus, humans can participate with Christ and become co-creators and co-redeemers of the cosmos.

Bonaventure shows how at the root of the Gospel mandate of poverty, there lies a recognition that God's love is expressed in all of creation, including human life, and is *pure gift*.²⁸ Indeed, in Christ Incarnate, the entire cosmos is united and transformed.²⁹ Bonaventure states:

All things are said to be transformed in the transfiguration of Christ. For as a human being, Christ has something in common with all creatures. With the stone he shares existence; with plants he shares life; with animals he shares sensation; and with the angels he shares intelligence. Therefore, all things are said to be transformed in Christ since--in his human nature--he embraces something of every creature.³⁰

Through Christ Jesus, our relationship with God brings us into relationship with the world. That relationship requires humility, poverty of spirit, austerity of life, and genuine charity (Jn 13:34-35).³¹ Considering Bonaventure's grasp of the cosmos, and his open attitude toward science,³² I think that, if he were present here today, he would hold, that his love-centered, virtue ethics requires, that we act to halt global warming.³³ Today I believe this would require that we act to stop tar sands mining and the Keystone XL Pipeline.

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ENDNOTES

¹ Thomas of Celano, "The Remembrance of the Desire of the Soul (1245-1247)," CXXIV, 165 in FA:ED Volume II – The Founder, ed. Regis J. Armstrong, J.A. Wayne Hellmann, and William J. Short (New York: New City Press, 2000), 353-354.

² Hoodoos are sandstone spires created over thousands of years by erosion and believed to be spiritually significant among First Nations forefathers.

³ For an excellent overview of the moral issues involved with tar sands oil extraction see *A Pastoral Letter on The Integrity of Creation and the Athabasca Oil Sands* by Luc Bouchard Bishop of St. Paul in Alberta, Canada January 25th, 2009,

http://www.dioceseofstpaul.ca/index.php?option=com_docman&task=cat_view&gid=15&lang=en accessed August 6, 2011. This document also provides detailed descriptions of the ecological destruction and hazards involved.

⁴ An overwhelming objection is that exploitation of tar sands would make it implausible to stabilize climate and avoid disastrous global climate impacts. According to the IPCC Fourth Assessment Report the tar sands are estimated (e.g., see http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg3_report_mitigation_of_climate_change.htm) to contain at least 400 GtC (equivalent to about 200 ppm CO₂). Easily available reserves of conventional oil and gas are enough to take atmospheric CO₂ well above 400 ppm, which is unsafe for life on earth. However, if emissions from coal are phased out over the next few decades and if

unconventional fossil fuels including tar sands are left in the ground, it is conceivable to [stabilize](#) earth's climate. (See J. Hansen, et. al., <http://pubs.giss.nasa.gov/cgi-bin/abstract.cgi?id=ha00410c>).

⁵ See for example Mark Green, "Energy Key: Keystone XL Pipeline," Energy Tomorrow Blog, 10 June 2011, <http://blog.energytomorrow.org/2011/06/energy-key-keystone-xl-pipeline.html?gclid=CNSn97ruuqoCFQUUKgodMHKXSQ> accessed August 6, 2011.

⁶ See Kenan B. Osborne, ed. *The History of Franciscan Theology* (St. Bonaventure, NY: The Franciscan Institute, 1994), vii-ix. See Zachary Hayes, "The Life and the Christological Thought of St. Bonaventure," in Damian McElrath, ed., *Franciscan Christology: Selected Texts, Translations and Introductory Essays*, Franciscan Sources No. 1, (St. Bonaventure, NY: The Franciscan Institute, 1980), 62-64. See also Timothy Johnson, "Lost in Sacred Space: Textual Hermeneutics, Liturgical Worship, and Celano's *Legenda ad usum chori*," 12. See E. R. Daniel, *The Franciscan Concept of Mission in the High Middle Ages* (New York: The Franciscan Institute 1975), 48.

⁷ Hayes, "Christ, Word of God and Exemplar of Humanity," 6.

⁸ Hayes, *The Hidden Center*, 42. – i.e. "rendered deiform."

⁹ Bonaventure, *Sermon on the Nativity* (IX, 106).

¹⁰ Bowman, "The Cosmic Exemplarism of Bonaventure," 187.

¹¹ Known hazards are clear and well documented including for example: Dr. James Hansen, "Silence is Deadly: I'm Speaking Out Against Canada-U.S. Tar Sands Pipeline." http://www.columbia.edu/~jeh1/mailings/2011/20110603_SilenceIsDeadly.pdf, accessed August 7, 2011. Also see Mark Guarino, "US: Canadian oil pipeline hazardous to the environment," *Christian Science Monitor*, June 4, 2011 <http://www.csmonitor.com/Environment/2011/0604/US-Canadian-oil-pipeline-hazardous-to-the-environment>, accessed August 7, 2011. Also Elizabeth McGowan, "Groups Demand More Time and Public Say in Keystone XL Pipeline Review," *SolveClimate News*, Thu Apr 7, 2011 1:00pm EDT <http://www.reuters.com/article/2011/04/07/idUS40338369320110407>, accessed August 7, 2011. See Elizabeth McGowan, "Nebraska Lawmakers Plead with Secy. Clinton to Delay Keystone XL Decision," *SolveClimate News*, June 3, 2011 <http://solveclimatenews.com/news/20110602/nebraska-senators-hillary-clinton-keystone-xl-pipeline>, accessed August 7, 2011.

¹² R. Eugene Turner, "Doubt and the Values of an Ignorance-Based World View for Restoration: Coastal Louisiana Wetlands," *Estuaries and Coasts* 32 (2009): 1054.

¹³ See *The Precautionary Principle* is available at <http://unesdoc.unesco.org/images/0013/001395/139578e.pdf> accessed December 24, 2010. See also the Commission of the Bishops' Conferences of the European Community (COMECE), *A Christian View on Climate Change: The Implications of Climate Change for Lifestyles and EU Policies* (Brussels, Belgium: COMECE, 2008), 17.

¹⁴ COMEST and UNESCO, *The Precautionary Principle*, p. 8. See the 1972 Polluter Pays Principle which requires that the costs of pollution be borne by those who cause the pollution. See also the 1992 Earth Summit, Agenda 21 as a principle of sustainable development. Today it is a generally recognized principle of International Environmental Law. Also see *1992 Rio Declaration on Environment and Development*.

¹⁵ COMEST and UNESCO, *The Precautionary Principle*, p.13.

¹⁶ See Heb 10:7,9; Jn 14:31; Jn 5:30.

¹⁷ Hayes, *The Hidden Center*, 37. Bonaventure's commentary on Luke stresses Jesus' obedience to people.

¹⁸ See T. Gilby, s.v. "Prudence," *New Catholic Encyclopedia*. Vol. 11. 2nd ed. Detroit: Gale, 2003, 787-792. Also see Scott Carson, s.v. "Phronêsis," *Encyclopedia of Philosophy*. Ed. Donald M. Borchert. Vol. 10. 2nd ed. Detroit: Macmillan Reference USA, 2006, p. 27-8. See also examples of secular environmentalist's value for prudence: Nigel Dower, "Ethics and Environmental Futures," *International* 21 (May 1983): 29-44. John R. E. Bliese, "Traditionalist Conservatism and Environmental Ethics," *Environmental Ethics* 19 (Summer 1997): 135-51. See also Charles J. List, "The Virtues of Wild Leisure," *Environmental Ethics*, 27 (Winter 2005): 355-73. Also see Vasileios E. Pantazis, "Reverence ('Ehrfurcht') for the Living World As the Basic Bioethical Principle: Anthropological-Pedagogical Approach," *Ethics, Place and Environment* 12 (June 2009): 255-66, especially at 262.

¹⁹ See <http://www.usccb.org/catechism/text/pt3sect1chpt1art7.shtml> accessed December 24, 2010.

²⁰ See "Scientific Knowledge and the Virtue of Prudence," §10-11, in NCCB/USCC, *Global Climate Change: A Plea for Dialogue, Prudence, and the Common Good*, June 15, 2001, <http://www.usccb.org/sdwp/international/globalclimate.shtml>, accessed December 24, 2010.

See also Steven Bouma-Prediger, "Why Care for Creation? From Prudence to Piety," *Christian Scholar's Review* 27 (Spring 1998): 277-97.

²¹ See full text of the homily at:

http://www.vatican.va/holy_father/john_paul_ii/homilies/1979/documents/hf_jp-ii_hom_19791004_usa-des-moines_en.html

²² See also Pope Paul VI, Address to World Food Conference in Rome, November 9, 1974. See also the regional pastoral letter issued by the bishops of Colorado, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Wisconsin, and Wyoming, *Strangers and Guests: Toward Community in the Heartland*, May 1, 1980.

²³ Hayes, *The Hidden Center*, 38-39. In Bonaventure's speculative theology and spirituality, love drives the Christ-mystery.

²⁴ Hayes, *Ibid.*, 202-203. See *Hex. 1*, 31-33 (V 334). Aristotle, *II Ethics*, c.6. See also *Hex.1*, 34-36 (V, 335).

²⁵ Hayes, *The Hidden Center*, 39. The spiritual life in Christ is a journey deeper into the foundational realities of the world. Understanding those realities also shapes Christian ethics. "To perceive the life of Christ as a paradigm, is to accept its fundamental values as normative for human life. The fundamental attitude and values of Christ must be so personalized in one's life, that they truly define one's relationship to reality."

²⁶ See Boff, *Cry of the Earth, Cry of the Poor*, 174-186. John Duns Scotus and Chardin makes this link even more explicit. See: Jn 1:3, 14; Heb 1:2; Col 1:15-20; Eph 1:3-14; Rev 1:8 and 21:6. Also see Ilia Delio, *A Franciscan View of Creation: Learning to Live in a Sacramental World*, The Franciscan Heritage Series Vol. 2, (St. Bonaventure, NY: The Franciscan Institute, 2003), at 31: "Bonaventure consistently claims that Christ belongs to the very structure of reality – as the Word, to the reality of God; as the Incarnate Word, to the reality of the universe created by God. It is Christ who reveals to the world its own meaning." See also Hayes, "Christology – Cosmology," 41-58.

²⁷ See discussion of "deep incarnation" in Denis Edwards, *Ecology at the Heart of Faith*, (Maryknoll: Orbis Books, 2006), 58-60. Also Duncan Reid, "Enfleshing the Human," in *Earth Revealing-Earth Healing: Ecology and Christian Theology*, ed. Denis Edwards (Collegeville, MN: Liturgical Press, 2000), 69-83. See Neils Henrick Gregersen, "The Cross of Christ in an Evolutionary World," *Dialog* 40 (2001):205.

²⁸ Hayes, "Christ, Word of God and Exemplar of Humanity," 11.

²⁹ See Bonaventure's *Disputed Questions on Evangelical Perfection*. Here we can see the influence of Pseudo-Dionysius on Bonaventure. See Jose de Vinck, *Introduction to the Works of Bonaventure*, trans. J. Guy Bougerol, (Paterson, NJ: St. Anthony Guild Press, 1972), 40.

³⁰ Bonaventure, *Sermo I, Dom II*, in Quad. IX, 215-19, quoted in Hayes, "Christ, Word of God and Exemplar of Humanity," 13.

³¹ Hayes, *The Hidden Center*, 39. See *Dom. IV in Quad. I* (IX, 232).

³² Hayes, "The Cosmos, A Symbol of the Divine," in Dawn M. Nothwehr, ed., *Franciscan Theology of the Environment: An Introductory Reader* (Quincy, IL: Franciscan Press, 2002), 249-67.

³³ See Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report - Summary for Policymakers*. See Gerald Baum, Monika Hellwig, and W. Malcolm Byrnes, "Global Climate and Catholic Responsibility: Facts and Responses," *Journal of Catholic Social Thought* 4/ (Summer 2007): 313-401. Also Elizabeth A. Johnson, "An Earthy Christology: 'For God so loved the Cosmos,'" *America* 200/12, Whole No. 4852 (April 13, 2009):27-30.

³⁴ Thomas of Celano, "The Remembrance of the Desire of the Soul (1245-1247)," CXXIV, 165 in FA:ED Volume II – The Founder, ed. Regis J. Armstrong, J.A. Wayne Hellmann, and William J. Short (New York: New City Press, 2000), 353-354.