Approaches to Culture Theory Series

VOLUME 1

The Space of Culture – the Place of Nature in Estonia and Beyond

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Aims & Scope
The Approaches to Culture Theory book series focuses on various aspects of analysis, modelling, and theoretical understanding of culture. Culture theory as a set of complementary theories is seen to include and combine the approaches of different sciences, among them semiotics of culture, archaeology, environmental history, ethnology, cultural ecology, cultural and social anthropology, human geography, sociology and the psychology of culture, folklore, media and communication studies.
PRE-MODERN ECOSEMIOTICS
THE GREEN WORLD AS LITERARY ECOLOGY

Alfred K. Siewers

Travelling between the 2009 CECT conference at Tallinn University, where the original version of this paper was presented, and a seminar on ecosemiotics at the University of Tartu, I found myself plunging into a holy spring in rural north-eastern Estonia. That experience (to which I will return below) embodied points that I sought to make in both presentations, regarding how narratives can function environmentally as landscapes. The presentations highlighted a specific regional pre-modern story tradition of 'overlay landscapes' in the islands around the Irish Sea, on a chronological continuum from the 'Celtic Otherworld' in early Irish and Welsh texts to the 'green world' of Middle and Elizabethan English texts [Frye 1967]. I suggested that this tradition illustrates an eco-poetics that articulates the reciprocal shaping of human culture in empathetic relation to ecosystem [Thompson 2007]. Such overlay landscapes interweave stories of an ancestral or spiritual realm with empirically physical geography in cultures around the world, as also seen for example in Iroquois and Ojibway tales in North America, early Icelandic sagas, and the Australian aboriginal dreamtime and songlines [Watson 1989].

Jonathan Bate (2000, 245) defines 'ecopoesis' as poetic expression “which may effect an imaginative reunification of mind and nature”, a psychosomatic and experiential inhabiting of nature linked to language, going beyond merely pastoral or technological literary settings. This essay will attempt to show a relationship between such eco-poetics in literature, ecosemiotics in landscape, and ecological restoration. Bate's definition follows earlier discussions in environmentally oriented phenomenology, which in the late twentieth century adapted Martin Heidegger's work to describe meaningful landscape as a network of place experiences, while morphing into areas as far afield (and sometimes as critical of Heidegger's views) as Gilles Deleuze's and Felix Guattari's geophysics [Deleuze & Guattari 1987]. Heidegger defined

a sense of place as a relational event, which he symbolised with the
metaphoric coming together of a fourfold of Earth, sky, mortals and
gods, rather than an interiorly represented object (Heidegger 2001;
Harman 2007). Edward S. Casey (2003), among others, explicated how
this could be adapted to landscapes as networks. Deleuze and Guattari
(1987), on a postmodern trajectory, in turn developed a theory of 'bodies
without organs' or 'rhizomic' continuities, using a natural image of
interlocking root networks between culture and nature, human intel-
lect and physical environment, similar in some respects to pansemiotic
notions of meaningful environment, but emphasising a physical con-
tinuum. Such efforts parallel medieval 'pansemiotic cosmologies' of an
incarnational cosmic language of music or energy-information', such
as Maximus the Confessor's logos (Maximus 2003), or John Scottus
Eriugena's primordial causes as theophanies (Eriugena 1987). In fact,
the philosopher Peter Hallward (2006) calls Deleuze and Guattari's rhizo-
mic cosmology a revived Eriugenism.

Today ecosemiotics provides an opportunity to connect such
insights more directly with cultural phenomena such as literature. The
nineteenth-century American Pragmatist Charles Peirce developed the
basis for the field a century ago by identifying the process of meaning-
making (or semiosis) with both logic and self-emptying (but also self-
realising) empathy. Peirce explicated the semiotic process as a triadic
dance of Sign, Object (potentially identifiable with the physical en-
vironment) and Interpretant (the latter definable as meaningful context,
habit or perhaps best as tradition) (Peirce 1998). That opened the door
for a more systematic understanding of the relationship between sign
and environment in the present century in Tartu and elsewhere (Nöth
1998). Recent scholarship in the sciences of mind supports the Peircean
identification of semiosis with ecological connectiveness through the
notion of ecoopoiesis (a term related to Bate’s ecoapoiesis and to ecoapoeics)
as exemplifying how the human mind develops in ecosystems rather
than in individual discrete interiority, by means of environmental
empathy akin to Peirce’s ‘agapism’ and to notions of self-realisation in
deep ecology, paralleling the ecosemiotic view of eco-region as a semiotic
sign process (Peirce 1992, Thompson 2007). Ecoopoiesis often refers in
the natural sciences to physical shaping of ecosystems through, for
example, ecological restoration. Its potential reference to both narrative
and physical shaping of the environment suggests the focus of this
eSS.

The outlining here of a particular regional literature of overlay land-
scape will relate Peirce's semiotic process to ecoopoiesis in a specific eco-
region, using a proposed concept of 'environmental semiosphere' or
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‘environmental semiosphere’ or
‘ecosemiosphere’. This term extends earlier definitions of specific sym-
bolic cultures as semiospheres, or meaningful environments, into phys-
ical environments. It also extends onto a regional level the description
in ecosemiotics of ‘nature-texts’ integrally related to physical environ-
ment (Maran 2007). The effort will examine the melding of global and
indigenous worldviews with the Earth in a regional context, namely the
Irish Sea islands, a region of dynamically entwined physical and cultural
elements during the early Middle Ages, which will here be described as
archipelagic in its entwining of land, sky, sea and wind. Ecosemiotics
provides a way to understand more deeply the environmental function of
overlay landscapes, such as the Otherworld of early Irish Sea islands,
by highlighting them as a triadic semiotic landscape process. In the
process, that triadic landscape discloses itself as one of four elements
that constitute ecopoiesis (to use the more generic literary spelling) as
defined here, by adapting Heidegger’s idea of the fourfold to literary
studies: Triadic overlay landscapes join metonymy in imagery, time-
plexity in multidimensional narrative, and a grounded ethos of habita-
tion in the world, in shaping ecopoetic textuality. The concluding sec-
tion of this essay will suggest how these basic elements for a model of
ecopoiesis themselves each parallel an aspect of Heidegger’s metaphoric
fourfold of place as intersubjective event — Earth, sky, mortals and
gods respectively (the latter two combining in Peirce’s Interpretant, the
first two being Object and Sign) — to join with physical geography to
form an ecosemiosphere.

Overlay landscapes that emerged in narratives of the islands around
the Irish Sea — from the Otherworld of early Irish and Welsh literatures
to the elvish realms of Middle English and Elizabethan poetry and
drama defined as the Green World by Northrop Frye — involve a
dynamic and multidimensional sense of landscape (Siewers 2009). In
them, engaging story is overlaid in effect on physical topography and
geographical features to produce a reciprocally formed culture and
nature of place. The paradigm can be traced back to an historical over-
lap of indigenous and biblical traditions of cosmology in the literary
cultures of the early Irish Sea. However, these overlay landscapes also
suggest an overlap between Trinitarian understanding of modes of
semiotics in early medieval cultures and psychoanalytic understanding
of triadic semiotic processes of the Real, the Imaginary and the
Symbolic. We see this in Julia Kristeva’s (1989) reinterpretation of these
in light of poetic language, mirroring Charles S. Peirce’s triadic of
Object, Sign and Interpretant respectively (the latter again in terms of
‘meaning’, ‘context’, or ‘tradition’).
In discussing the inter-relation of these semiotic models and ecosemiotics, this essay will argue that the pre-modern insular overlay landscapes function as ecosemiespheres. In this role they both expand our sense of what constitutes an ‘ecocentric’ text as defined by the pioneering ecocritic Lawrence Buell (1995) — a narrative entwining the human in larger contexts related to the Earth — while aiding our understanding of how such narratives may contribute to twenty-first-century regional ecological restoration efforts.

**Experiencing Overlay Landscapes Today**

My encounters with on-the-ground overlay landscapes in the Estonian countryside during the time this paper first emerged form a contemporary example of landscape traditions involving the triadic processes of meaning mentioned above. These experiences included visits to national parkland that are both a cultural and natural reserve, while considering the history of the intermingling of nature and culture in wooded meadows studied by ecosemioticians (Kull et al 2003). However, in terms of personal firsthand experience, they especially involved the aforementioned plunge into the holy spring at the Pahtitsa Dormition Orthodox women’s monastery, near the Russian border in north-eastern Estonia at Kuremaa.

The Sunday after the conference and the day before my presentation at Tartu, my two Russian-speaking roommates from the monastery guesthouse got me up for a walk though a misty late-October dawn, through a graveyard and then to a country lane, arriving at a small shrine at a spring dedicated to the Mother of God. There my previously unknown companions led me to a small bathhouse where they showed me how to plunge ritually three times into the spring. Afterward we made our way back up to the guesthouse, passing an ancient oak’s trunk and small chapel, both linked by sixteenth-century tradition to a vision associated with the place, involving the discovery of a sacred icon of the Mother of God by the spring. Then we went past a gateway whose iconography depicted the discovery of the icon at the tree and the spring, into the cathedral church where the faithful venerated the icon amid chanting, incense and participation in the Eucharist.

The layers of landscape and narrative were complex. Russians founded the monastery in 1891 when the area was part of the now-vanished czarist Orthodox empire, on the site of a half-built Lutheran church, in turn on a hill whose name means ‘blessed’, believed long before to have been home to a forest chapel of the Finno-Ugric Vodic people, near medieval trade routes to Novgorod (Estonian... nd). Today it stands as a
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Peircean triadic frameworks for semiosis involve describing that process environmentally as relationship rather than as an interiorised Saussurean binary of signified and signifier: the latter comparable to Scholastic semiotics of archetype and analogue, or scientific metaphysical semiotics of subject and object. For Peirce, such semiotic binaries were neither fully semiotic nor communicative, qualities that become basic definitions of life itself in biosemiotics and ecosemiotics today (Nöth 1995). Rather, they ultimately reify a kind of binarised violence of culture versus nature. Contrarily for Peirce, the semiotic process in its relation-
ality equates with both logic and a kind of self-realising love or kenosis (sacrificial but vivifying an outpouring of self) that can be understood today both in terms of neurophenomenological understanding of the role of environmental empathy, and relationality in development of the human mind (Peirce 1992, Thompson 2007).

In Peirce’s sense of the semiotic process, experience of the holy spring at Pühitisa as outlined above involves a relationship of Sign, Object and Interpretant. The latter, the most ambiguous of Peirce’s terms is defined as a third element of meaning or habit or law, also understandable as context or tradition (Short 2004). So in reading the landscape ecosemiotically, the story of the holy spring embodied in the icon and communicated both orally and performed in bodily devotions, liturgical work and ascetic prayer, would be the Sign, the physical landscape of the spring and hill and tree would be the Object, and the Interpretant would be the Orthodox tradition and cosmology relating the symbol of tree and spring to the Mother of God identified with a spiritual Paradise on a continuum with the Earth.

To unpack further the Interpretant as tradition shaping an eco-

semiosphere through a dynamic of memory, performance and practice, let us consider how the symbol of the Tree of Life in Genesis is explicated in Greek patristics (the backdrop for Orthodox traditions) as Christ and as also symbolising contemplation, or a kind of semiotic process involving ascetic practice. This tradition describes the Tree as
the Logos whose branches are filled with logoi or divine energies in Creation (Eriugena 1987; Thunberg 1997; John of Damascus 1999; Ståmiloe 2000). Likewise the common source of the rivers of the world in Genesis is associated with the place of the tree in Eden, as is the combination of sacred tree and well in other traditions such as Norse mythology. That association can engage the spring at Pühtitsa with symbolism of the waters on which the Holy Spirit moved in the Genesis creation story, and also with the living water of Christ that in Christian tradition is associated with baptism.

The Theotokos, or Mother of God, herself in Orthodox tradition is often iconographically associated with a living spring, even as she is identified in liturgical hymns as a spiritual garden, the human person bridging heaven and Earth. She is considered both a special intercessor and the first person of regular birth to be brought to heaven (in effect restored to Paradise as well) in both body and soul at the Dormition for which the monastery in Pühtitsa is named. The Dormition in Orthodoxy, distinct from the Assumption in Roman Catholic tradition, emphasises the humanity of the Virgin Mary, reflecting the absence of the Scholastic doctrine of the Immaculate Conception. The Mother of God is a human being born and dying normally, although her soul and body are reunited in heaven before other human beings. She becomes a key intercessor identified again with a personal relationship between heaven and Earth. As such the Theotokos herself embodies a kind of cosmic semiosis in Orthodox tradition, paralleling the notion of iconography itself as a kind of embodied cosmic semiotic process linking physical and cosmic spiritual realms including Paradise envisioned as a kind of spiritually earthly place typifying Earth’s coming transformation to heaven (Siewers 2009). Her body in this tradition is itself an overlay landscape, encompassing all Creation with the Creator in her womb, while she also is encompassed by God.

In all this, what Edward S. Casey (1987, 15) termed an “activist memory” shapes in tradition the phenomenological reality of a landscape in which human subjectivity develops in relation to the physical environment. This realises an ecosemiosphere. Casey defined an activist memory as one that shapes realities based on interaction with realised or performative experiences of memory. Such a sense of memory can be stimulated by what the eco-phenomenologist David Wood (2003) has called ‘timeplexity’ — cultural narratives that articulate multiple overlaying dimensions of time and non-time, which when disrupted in modern objectifying landscape, form the condition termed ‘solastalgia’ by environmental psychology today (Smith 2010).
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My experience of the landscape of Pühitisa Hill exemplified time-plexity, within the Orthodox tradition of a fourfold patristic Christian model of time and non-time. Those four modes include, first, conventional human or ‘cell phone’ time, for example my dismayed checking of ‘the time’ very early on Sunday morning when awakened by my roommates in the monastery guesthouse. Second, the natural time of cyclical seasons reflects a sense of how time may move differently for non-human beings in the natural world — as in the rural Estonian autumn around us on our walk to the spring. Third, the eternal time of created incorporeal beings that fill seeming empty spaces showed forth as the time of angels who are said to gather at the Divine Liturgy, such as the one we attended after visiting the spring. Fourth, the everlasting uncreated non-time of God touches and sparkles in the physical world through uncreated energies [or logoi] of God in the Orthodox theology of creation, as in the iconographic landscape encompassing both spring and church and experience of the Eucharist itself as a both real and symbolic communal transfiguration of nature (Mantzaris 1996; Romanides 2007).

In terms of both cosmic iconography and semiosis, human beings made in the image of God are considered to be so in both body and soul, modelled on the incarnate Christ. They exercise in this tradition bibilical ‘dominion’ by participating in cosmic semiosis with the divine logoi by which they can in effect become gods (Gregory of Nyssa 1994a). They can be at one with the divine energies, although not the essence of God. They experience, in effect, the ‘new Earth’ transfigured into a Paradise that is both earthly and, beyond that, spiritual. Thus human beings in this performative tradition of nature participate in all the patristic modes of time and non-time, in ‘active memory’ shaping a dynamic landscape of both semiosis and empathy. This multi-layered dynamism parallels Heidegger’s sense of the fourfold ‘thing’ or place as event. It contrasts with the Augustinian sense of ‘eternal present’ (St Augustine 1961), and the transcendental subjectivity required to gaze on the panoply of linear time as a kind of monolithic objectification of landscape, which encourages what Casey [1987, 15] calls a “passive memory” in modern Western technological culture.

The above-described semiotic process in its time-plexity involves a network of landscape experiences. In them, to use Peirce’s terms, Interpretant can also become Sign in realising a purpose from the empathetic connectivity of the process. Thus the tradition of the tree and the spring can become a sign for the Orthodox ecumene, a perspective of cultural landscape different from that of the post-Christian or Catholic or Protestant West, featuring its own networks of meaningful environment.
Ultimately it also involves the Earth as a whole through the cosmology's basis in the opening of Genesis and global networks of Orthodox Christianity, as a potential ecosemiosphere of the Earth.

The Interpretant of the Orthodox symbology of the tree and the well, related to the Theotokos, thus potentially becomes a Sign for the Object of the Earth, relating also to an Interpretant of the universal Church identified with the Earth. That Church itself becomes a sign for the Earth understood regionally at Puhtitsa through the Interpretant of the landscape. This relates to Evan Thompson’s (2007) notion of eco-poiesis, which he uses in the context of modern phenomenological and mind sciences to describe the Gaia hypothesis in a developmental sense, by which human minds and culture collectively co-shape themselves with the Earth. Ultimately the Orthodox identification of the Mother of God with Paradise spanning heaven and Earth shapes a Christian eco-poiesis, ranging dynamically from the local and regional to the planetary and beyond.

Ecopoiesis for Thompson (2007) is in Peirce’s terms the semiotic process mutually forming autopoiesis of individual cells or organisms in tandem with their networked environment, ultimately the Earth. It reflects the triadic model of Peirce’s semiosis, expressed in the type of overlay landscape found at Puhtitsa. As noted earlier, in some biological and engineering sciences, eco-poiesis literally means a physical shaping of the ecosystem, as in an ecological restoration process. Yet in eccritical terms, ecopoiesis or in literary terms ecopoetics, also follows Lawrence Buell’s (1995, 6-8) definition of an eocentric text as (1) featuring a “nonhuman environment” as a presence that suggests “human history is implicated in natural history”, (2) in which “the human interest is not understood to be the only legitimate interest”, (3) “human accountability to the environment is part of the text’s ethical orientation”, and with (4) “some sense of the environment as a process rather than as a constant”.

Returning to the sense of narrative as landscape at Puhtitsa, the overlay landscape can be articulated in terms of the related four elements of ecopoetics mentioned earlier. (1) It includes the triadic process discussed above. (2) Within that, it features metonymic or physically oriented metaphor (the Sign), embodied in the Puhtitsa icon and its traditions, reflecting the Orthodox sense of the Eucharist as a symbol not dividing the real and the figurative, but integrating them in a mystery. (3) The aspect of time-plexity already discussed above forms the meaningful relationship between Sign and Object in ‘activist memory’, acting as Interpretant. (4) An ethos-grounded in-place, in the holy spring and environ, forms a meaningful physical environment of semiosis involving
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experience of the Earth as holy that can restrict human exploitation or objectification of that Object, akin to American Indian notions that “wisdom sits in places” (Casey 1987, 15; Basso 1996; Wood 2003). These in turn can be related to Buell’s four points of ecocentricity, transposing (3) and (4).

This pattern of triadic-relational ecopoetic landscape reflects psychoanalytic modes of semiosis examined by the theorist Julia Kristeva (1984; 1989). Kristeva, in examining the semiotics of poetic language, adapted the Lacanian view of language and human development as reflecting a development from the mode of the Real (beyond language) to the Imaginary (or mirror-stage of formation of the self in the context of community and culture) to the Symbolic (the constituting of self in language separated from the Real). Even as Deleuze and Guattari (1987) critiqued that sense of the separation of the Symbolic from the Real as a culturally specific Western psychoanalysis, Kristeva (1989) posited a poetic semiosis that could involve a dynamic inter-relation of the three modes, which she also related to a non-Western sense of triadic cosmology. In a Kristevan reading of Pūḥtītsa as landscape, the spring and physical environs could be considered the Real, the icon and performative devotion to the Theotokos the Imaginary or iconicographic, and the landscape tradition, the sense of landscape as narrative, the Symbolic.

Kristeva’s explication of early models of the Trinity as a model for human development (humanity in the Orthodox tradition being seen as made in the image and likeness of Christ and hence ultimately of the Trinity) suggests a theological pre-modern feedback loop, paralleling the semiotic and psychoanalytic models mentioned above. The non-Western Orthodox formulation of the Trinity, as Kristeva points out, lacks the so-called filioque clause in its Nicene-Constantinopolitan creed (Siewers 2009). In it, the Holy Spirit proceeds from the Father, and the Son is the only begotten of the Father. In later Western Latin versions of the same creed, the term filioque was inserted to emphasise that the Holy Spirit proceeds from the Father “and the Son”. The resulting effectual fusing of Father and Son, Kristeva (1989) notes, shaped a dyadic formula of reality empowering development of a Western subjectivity that emphasised autonomy and equality of the individual’s increasingly interiorised reality. By contrast, she points out, the more triadic and relational Orthodox theological framework paradoxically emphasised identity and difference in its balance of Father, Son and Holy Spirit. Identity with difference engenders in turn a cosmic ethos of spiritually erotic empathy, which parallels Thompson’s notion of developmental environmental empathy and Peirce’s sense of empathetic semiosis. All three of these parallel models (psychoanalytic ‘semanalysis’,
the latter Kristeva's own term for her system, the eco-phenomenology of Thompson, and the ecosemiotics of Peirce) overlap in reading the landscape-narrative to highlight a mutual environmental significance in an ecosemiosphere.

The phenomenological description of the experience of Púhtitsa sketched above, considered in light of the above relational paradigms for landscape-narrative as a practice or performance of environment, illustrates a non-modern interpretation of landscape through ecosemiotics, although the monastery at Púhtitsa itself was founded only in the 1890s, but based in older traditions. The section that follows attempts to carry the application of this model back further in time, to literature from the first millennium or early medieval era in the British Isles, to examine more fully the applicability of ecosemiotics to pre-modern landscape-narratives and insights into current environmental concerns this may afford.

Pansemiotic Medieval Approaches

In the case of early Irish and Welsh Otherworld stories, what later became known in English as ‘elvish or fairy landscapes entwined with local geographies and environmental features from Neolithic mounds to the archipelagic interweaving of sea and land in insular landscapes. Monastic literary centres in the islands described spiritual deserts akin to what St Athanasius’ *The Life of St Antony*, an influential prototype of medieval hagiography, had called a spiritual sea in the physical deserts of the Eastern Mediterranean (Siewers 2005a). ‘Desert asceticism’ began in the fourth century as a kind of counter-cultural protest against the Roman Empire but quickly became an embodied ‘practice of nature’ in which fasting, prostrations, daily liturgical cycles, a sense of exile in often harsh but aesthetically inspiring rural landscapes involving reconstructing one’s subjectivity in larger cosmic contexts linked to one’s body (Lane 1998; Chryssavgis 1999; Sheldrake 2001). Meditative prayer and chanting without ceasing, akin to modern hesychasm in the Athonite tradition, involved a grounding of heart in the mind and an opening to the energies as grace. In effect, the ascetic tradition as interpretant of the desert became then a Sign for geographies in the islands around the Irish Sea. Its Interpretant in turn became the ascetic tradition of apophatic theology of divine energies infusing nature, integrating the physical and the spiritual.

Patristic interpretations of the opening chapters of Genesis formed a basis for this performative cosmology. It influenced both early traditions of Celtic and Eastern Orthodox asceticism used as examples in
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this essay. It also helped to provide a model for the literary Green World 
overlay traditions that grew from early Irish ascetic performance of a 
spiritual desert in the islands. Frye (1967) described the Green World of 
English literature in Edmund Spenser's Faerie Queene and William 
Shakespeare's A Midsummer Night's Dream as a fairy world aligned 
with the natural world and poetic imagination that mirrored everyday 
human life. This green world developed first in Middle English litera-
ture, notably Geoffrey Chaucer's Canterbury Tales and the anonymous 
Sir Gawain and the Green Knight. In those early texts the debt to the 
Celtic Otherworld was clear in key thematic areas (Siewers 2009). The 
relation of the green world to actual geography was more precise in 
Spenser's work, although Shakespeare's Puck and fairies owe an apparent 
debt to Celtic traditions as well (Harries 1991; Siewers 2010).

Physical matter was seen as infused with uncreated divine energies, 
not so much an objective reality in itself but as a dynamic process. This 
was arguably a factor in positive cultural exchange with native cos-
nologies evident in the spread of these monastic cultures to not only 
the Irish Sea (where they provided the basis for Irish and Welsh literary 
cultures), but also in regions that later saw a literary flowering of other 
non-modern overlay landscapes, particularly Iceland in its sagas. The 
exegetical basis for such an overlay landscape in the hexameron tradi-
tion going back at least to the fourth century, and foundationally influ-
ential in both early Irish and Eastern Orthodox traditions of cosmic 
space, can be glimpsed in St John Chrysostom's commentary. In the 
revelation of creation to Moses in Genesis 1, in effect God writes a 
book or letter to human beings about their Earth:

He gives you a glimpse of it before its making as lacking form 
and outline so that you may see its limitations and admire 
the one who produces it and confers on it all its potential, the 
purpose being for you to glorify the one who prepares such 
wonderful things for your welfare (Chrysostom 2004, 35–36).

His accompanying exegesis discusses how such cosmic narrative leads 
to a non-objectifiable sense of matter, an impetus for alms-giving and 
ascetic living as expressing a cosmic semiosis of empathy. He describes 
the scriptural language itself as both historical and contemporarily 
 experiential. Such emphasis on relational process as shaping and imbuing 
the Earth with everlasting transformative energy is a hallmark of 
desert ascetic theology and its later articulations of hesychastic prac-
tice. It also parallels different notions in indigenous cultures, such as 
Native American and Daoist, of the physical environment as flush with 
energies (Oleksa 1987; Christensen 1999).
Formulations of the Trinity influential in desert asceticism emphasised a triadic movement of hypostases whence came these divine energies in nature. Evidenced in key Irish-related texts, these early traditions of the Trinity differed from the formulation of more binary Western notions of the Trinity in the later Scholastic era (Siewers 2009). The latter, on the contrary, supported a duality of mind and body emerging from Augustine's dyadic model of the Trinity, with its emphasis on individual interiority, which became the norm in Western Europe at the time of the Norman Conquest of the Irish Sea islands (Kristeva 1989). Augustine's emphasis on the authority of the Father and Son together in the Trinity shaped a model for a powerful Western sense of individuality, the subject from which proceeded the Holy Spirit as a kind of object associated with creation. The early Irish Stowe Missal, a rare liturgical manuscript, in its original form eschewed the Augustinian formula for the Trinity in favour of the earlier Nicene-Constantinopolitan Creed, which emphasised more a perichoresic balance among the Three Persons of the Trinity. The early Irish philosopher John Scottus Eriugena did the same in the most complete Hiberno-Latin philosophy of nature, his *Periphyseon*. This triadic cosmic model involved, through the adapted desert asceticism expressed in early Irish spiritual texts, an emphasis on immanent transcendence (avoiding the binary of subject–object) in the presence of divine energies in the physical world, or theophanies as Eriugena often termed them. These emanated from the triadic Trinity as a whole, rather than the dyadic Trinity of Scholasticism, which manifested a Thomist created (objectified) grace amid an objectified analog landscape of Earth.

For St Paul, in a text that provided a basis for patristic overlay cosmologies enduring in desert asceticism and its literary offshoots in the Western islands, "faith is the substance [not just the analogy] of things hoped for, the evidence of things not seen" (Heb 11:1). Cosmologically this implies a kind of enchantment of landscape (the reverse of modern disenchantment) that potentially addresses from a pre-modern stance:

[... environmentalists need to tap into the creative worlds of mythmaking, even religion, not to better sell narrow and technical policy proposals, but rather to figure out who we are and who we need to be (Schellenberger & Nordhaus 2004).]

The emphasis for them lies in performative cultural practices of nature, related to traditional stories that shape cultural relationships to overlay landscapes such as those of the early Irish Sea islands. Practices of nature such as desert asceticism based on Genesis, embodying
influential in desert asceticism, hypostases whence came these in key Irish-related texts, these from the formulation of more in the later Scholastic era, supported a duality of mind's dyadic model of the Trinity, riority, which became the norm in Conquest of the Irish Sea emphasis on the authority of the Trinity, which shaped a model for a powerful subject from which proceeded the ated with creation. The early Irish manuscript, in its original form, the Trinity in favour of the car, which emphasised more a peric. Persons of the Trinity. The early an did the same in the most conur, his Paraphrase. This triadic the adapted desert asceticism, an emphasis on immanent tran-subject-object) in the presence of, or theophanies as Eriugena often in the triadic Trinity as a whole, holasticism, which manifested a mid an objectified analogic land-
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mm and its literary offshoots in the ce [not just the analogy] of things seen” [Heb 11:1]. Cosmologically: landscape (the reverse of modern resses from a pre-modern stance: tap into the creative worlds of not to better sell narrow and rather to figure out who we are (Berger & Nordhaus 2004).

ative cultural practices of nature, e-cultural relationships to overlay ly Irish Sea islands. Practices of based on Genesis, embodying ecosmiophysics of Earth regionally or globally, to them presumably would be valued not so much as either myth or religion per se, but as empirical phenomenological experience shaping human communities of relationship within landscape.

The ‘pansemiotic’ nature of medieval approaches to the physical environment thus appears more ‘ecocentrically’ as energy in Greek and Syriac patristics and their reflections and parallels in early Irish practices and literature, rather than in later Latin Scholastic emphases on cosmic analogy. In contrast to earlier Aristotelian definitions of energy, this Christian uncreated energy emerged in nature from its apophatic mystery of essence. Heidegger echoes the cosmological significance of this energy theory in describing primordial nature or physis as both disclosing and hiding itself, and so avoiding objectification in its realisation [Harman 2007]. The difference between this approach and the allegorical emphasis in later Western semiotics and cosmology, based on a more binarised semiosis of analogies formed by divine archetypes and suggested by Question 13 of the first part of Aquinas’ Summa Theologica, can be glimpsed in the ‘fairylandscape’ landscape overlay in literature of the early Insular tradition shaped by desert asceticism, by comparison with Dante’s Commedia. The early Irish Otherworld and derivative-retro overlay landscapes such as The Canterbury Tales and Sir Gawain and the Green Knight entwine the energies of an imaginative green world with real world geography. By contrast, in Dante’s scholastically influenced Commedia, landscape is allegorically based on analogy and removed from any particular earthly geography. The emphasis in modern scientific and technological worldviews of a mathematic framework for experiencing landscape, separated from personal phenomenology, emerged from the latter sense of cosmic archetype and analogue. The ultimate ‘subject’ metaphorically became the individual scientific mind, rather than that which is experienced in the world, which became object.

The Otherworld’s underlying energy doctrine emerges in the cosmology of St Maximus the Confessor in the seventh century and its adaptation by the Irish philosopher Eriugena in the ninth century, already referenced. They elaborated on earlier patristic writers — drawing on Paul’s writings and including St Gregory of Nyssa, St Athanasius the Great and the Christian Dionysius — in doctrine that was later developed by Greek patristic writers such as St Symeon the New Theologian in the tenth century and St Gregory Palamas in the fourteenth century. For Maximus, the essence of created beings lay in the potential of uncreated logoi (words or harmonies) of the logos, which also in effect were the uncreated energies by which created beings could
undergo divinisation or union with those activities of God. These *logoi* were not archetypes in the essence of God, as in Scholastic cosmology, but again energies or activities emanating from the unknowable essence and interwoven with the world, which distinguished them from created grace. In the old Greek sense of *analogia*, there was a dynamic ongoing relationship of ratio through these energies between Creation and God, even as the divine essence remained forever distinct from the world (Siewers 2009).

In constituting the environment as embodying information-energies, the Maximian *logoi* energies function in overlay or ‘enchanted’ landscapes of Earth as a Christian prototype of contemporary secular biosemiotic and ecosemiotic views of triadic semiosis as life and evolution itself as information-based sign-communication (Kull 1998, Hoffmeyer 2008). Contemporary physics itself suggests a return in secular terms to an information-energy model of matter that also parallels ecosemiotics. A developing understanding of quantum entanglement recently has led to the suggestion that quantum-energy information models, rather than material laws, may provide the best descriptors for the properties of the universe (Physicist... 2010). Postmodern cosmology suggests the latter may be holographic in basic framework, according to ‘new physics’, oddly paralleling experience of overlay landscapes in pre-modern traditions in their iconographic pop-up participatory experience for audiences (Chown 2009). The strong anthropic principle also shapes cosmological speculation today by scientists such as Stephen Hawking, suggesting both the centrality of human semiosis to our universe and the possibility of other realms of existence entwined with our own, as in Eriugenæ’s early medieval notion of the human realm as the embodied semiotic overlapping of spiritual and physical realms (Barrow & Tipler 1986; Hawking & Mlodinow 2010).

In summary, early Irish texts such as *Imram Brain*, *Tochmarc Étainé*, *Táin Bó Cúailnge*, the Four Branches of the Welsh *Mabinogi*, *Culhwch ac Olwen*, and the ‘legendary poems’ attributed to Taliesin attest tropes of a spiritual-imaginary overlay landscape in geography of Europe’s Atlantic islands. These reflect from monastic literary cultures the early energy doctrine, mingled with native traditions and distinct from the Scholastic cosmology of analogy. In the latter, exemplified by Aquinas’ work, *logoi* had become archetypes in the Divine Mind differentiated from the energies of created grace. Such cosmology was reflected in that of Dante’s *Commedia*, with its allegorical and extra-earthly landscapes, focused around the experience of an individual human being encountering historical subjects in fantasy landscapes. By contrast, the early Irish Otherworld related directly to earthly geography,
ose activities of God. These logos of God, as in Scholastic cosmology, emanating from the unknowable world, which distinguished them from the unknown by the sense of analogia, there was a through these energies between essence remained forever distinct as embodying information’s function in overlay or ‘enchant’-prototype of contemporary secular triadic semiosis as life and evolution communication (Kull 1998; Hoffmann 2010). Postmodern cosmology in basic framework, according to research of overlay landscapes in pre-linguistic pop-up participatory experience strong anthropic principle also by scientists such as Stephen Hawking’s semiosis to our universe of existence entwined with our notion of the human realm as the ritual and physical realms (Barrow 2010). Much as Immram Brain, Tochmarc Branches of the Welsh Mabinogi, the poems’ attributed to Taliesin overlay landscape in geography of the from monastic literary cultures with native traditions and distinct story. In the latter, exemplified by archetypes in the Divine Mind difference. Such cosmology was reflected in its allegorical and extra-earthly experience of an individual human in fantasy landscapes. By contrast directly to earthly geography, to historical landscapes with otherworldly beings, thus reflecting how the individual human subject was considered shaped within a practice of networks of divine energies in nature.

Unlike the dyadic model for reality in emerging medieval Scholasticism, involving archetype and analogue and influencing development of theoretical metaphysics and individualistic cognition as hallmarks of the West, the Otherworld trope involved a triadic relation of overlay landscape tradition to text and to physical geography. It did so with a sense of sign involving participation, reflecting in part again the original Greek sense of analogia as involving proportional relationship, in keeping with a psychosomatic sense of energy rather than an arbitrarily interiorised association of signified and signifier identified with individual cognition. In this the Otherworld also symbolises a significant ecosemiospheric overlap between three models already outlined for understanding both language and cosmology: (1) The Trinitarian deep structure of early Christian culture on the Irish Sea and its cosmological reflections, (2) Peirce’s triadic model of semiosis or process of sign-making, and (3) Kristeva’s adaptation of the Lacanian psychoanalytic triad of the Real, the Imaginary and the Symbolic to poetic language formative of the intersubjective self.

Appreciating the overlap of these models enables a more specific theoretical model for understanding the environmental function of narrative overlay landscape. Kristeva’s analysis of early Trinitarianism as a premodern model of the pansemiotic can relate the Trinity’s Father, Son and Holy Spirit to Lacan’s modes of the Real, the Imaginary and the Symbolic respectively, and in the same sequence to Peirce’s triad of the semiotic process as consisting of Object, Sign and Interpretant. The Interpretant forms the contextual ‘meaning-plan’ or practice of nature in which reader and author emerge within semiosis or cosmic sign-making, themselves taking shape in the landscape as sign of the overall process or tradition. Thus the Real or source-beyond-language would be the physicality of the cosmic world, the Imaginary or cosmic Sign (analogous to the Logos) would be the text-stories in which the subject’s identity first forms, and the Symbolic or Interpretant would be the pansemiotic ‘language’ or context. So in this case, the Interpretant involves a cultural landscape of the spiritual-ancestral Otherworld, a network of trans-human contexts entwining and shaping signs, human subjectivity and non-human realms.

Such pre-Scholastic and pre-modern models do not privilege speaking above writing as does Scholastic semiotics, but rather stress a blend of the two in an iconographic writing akin to the harmonics (logos) of the cosmic music articulated by St Gregory of Nyssa (1994b), spanning
the spiritual and the physical realms. In them, writing itself would be a physical process, akin to iconodulic theology's proclamation of the Incarnation as a thickening of Word into Image (the Logos being the Image of God within which human being is made, according to readings of Genesis 1 in this milieu) [Balfour 1982]. There is not in such triadic early structures the melding of the Father and the Son, the Real and Imaginary, and the Sign and Object, found in later more dualistic Scholastic notions of the Trinity and signs. The latter indeed became the basis for Western dyadic views of mind-body, subject-object, and nature-culture [Kristeva 1989].

In dualistic Western cosmic semiotics, a self-interiorised cultural 'actual' becomes accepted as a Matrix-like reality projected as 'real' landscape, such as the Enlightenment-inspired grid of right-angled property survey lines that reshaped much of America's landscape. By contrast, the triadic structure of pre-modern overlay landscapes, playing off physical geography, grew on the islands of the Irish Sea a kind of three-dimensional or iconographic version of Peirce's triad and Buell's definition of an ecocentric text. That holoscopic iconographic effect forms the model for an environmental semiosphere that I seek to develop here: a realm of environmental meaning linking geography, cultural narratives and landscape in participatory imaginative energy.

The Otherworld Trope in Irish Sea Islands

Let's examine more specifically how all this works in the early Irish Sea texts mentioned above. In The Voyage of Bran, the Otherworld is the sea itself (Meyer 1972; Mac Mathúna 1985). It encompasses the islands within it including Bran's home on Lough Foyle, an inlet of the sea touching on what is now Derry in Northern Ireland and associated with underwater wonders. Travelling on the sea, Bran experiences a sense of travelling in clouds above lands within the sea as described by a sea god:

An extraordinary beauty it is for Bran
In his coracle across the clear sea:
but to me in my chariot from a distance
It is a flowery plain on which he rides about.
What is clear sea for the proewed skiff in which Bran is,
That is a delightful plain full of flowers
To me in a chariot of two wheels.
Bran sees multiplicious waves beating across the clear sea:
I myself see in Mag Mon
Red-headed flowers without blemish.
Sea-horses glisten in summer
In them, writing itself would be theology’s proclamation of the Image (the Logos being the log of the log). There is not in such triadic terms, the Son, the Real and found in later more dualistic signs. The latter indeed became body, subject–object, and

ics, a self-interiorised cultural reality projected as ‘real’ it-inspired grid of right-angled such of America’s landscape. By dem overlay landscapes, playing lands of the Irish Sea a kind of ion of Peirce’s triad and Buell’s holoscopic iconographic effect atmosphere that I seek to develop ing linking geography, cultural imaginative energy.

this works in the early Irish Sea of Bran, the Otherworld is the 85. It encompasses the islands of the sea and Ireland as described by a sea god: Bran ear sea: on a distance ich he rides about. a ried skiff in which Bran is, all of flowers wheels. ving beating across the clear sea:

As far as glances of Bran’s eye traverse:
Blossoms pour forth a stream of honey
In the land of Manannán son of Lir.
The sparkle of the expanses that you go over,
The brightness of the sea, on which you row about,
Yellow and blue-grey-green are spread out,
It is Earth that is great.
Speckled salmon leap from the womb
Of the shining sea, on which you look,
They are calves, beautifully coloured lambs
At peace without strife...
The expanse of the plain, the number of the host,
Beauties shining with bright quality,
A fair stream of silver, stairs of gold,
Bring a welcome at every great feast.
A pleasant game, most delightful,
They play in fair contention,
Men and gentle women under a bush,
Without sin, without crime.
Along the top of a wood has floated
Your coracle across ridges,
There is a beautiful wood with fruit
Under the prow of your little boat.
A wood with blossom and fruit,
On which is the vine’s true fragrance,
A wood without decay, without defect,
On which are leaves of golden hue.
We are from the beginning of creation
Without age, without decay of Earth-freshness.
We do not expect weakness from decline.
The sin has not come to us.

Here we may stop to recall the formational landscape of desert as spiritual sea for early Christian monastics, as described in The Life of St Anthony in the sense of otherworldliness within landscape indicated by desert asceticism (Lane 1998; Sheidrake 2001). However the early Irish use of the Latin desertum to describe the sea, islands and land refuges of monastics-in-exile, transfigured the actual sea into a spiritual desert, with the latter term standing for elemental human interaction with the cosmos that subverts social norms. As expressed in The Voyage of Bran, written down in such an insular monastic environment, this archipelagic mirroring of overlay landscape entwines the sea and land.

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so that it becomes difficult to determine a primary earthly reality. Bran’s own home on ‘solid Earth’ itself becomes an Otherworld in the story. The early Irish use of the colour *glas* (translatabe as ‘the colour of sky in water’) as a colour term spanning the spiritual and the physical exemplifies this cosmic mirroring of landscape in the Otherworld trope, reflecting the mirroring of aerial and terrestrial waters in Genesis (Siewers 2009). *Glas* designated a type of martyrdom related to both marine and aerial imagery and to bodily asceticism, as well as to a wind direction from the south-west associated both with the sea and the Otherworld. All with apparent affinities to the energy doctrine of desert asceticism mentioned above.

This ancestral Irish Otherworld, described as in the above text in the sea, was also mapped in other monastically produced literature as accessible from Neolithic mounds in the landscape, as in *The Wooing of Étain*, perhaps roughly contemporary in origin to the Bran story, from the late eighth century (Siewers 2009). In the *The Cattle Raid of Cooley* its various versions dating back in their core probably to the same era as well), a conflict marks the end of the old order of pre-Christian Ireland, with otherworldly presences entwined in geography of the countryside that is in fact today marked by highway and hiking/bicycling markers (Siewers 2009). Likewise the Welsh *Mabinogi*, dating from perhaps the early twelfth century but drawing on earlier traditions (some of Irish origin), involves a textual landscape tapestry criss-crossing south and north Wales. Its layers of re-imagined mythical and biblical meanings overlay Welsh geography in a probable act of narrative resistance to Norman Conquest condensing native experience of landscape in defiance of attempted erasure of indigenous traditions of landscape by a colonial regime (Carey 2007; Siewers 2009).

One commonality of the early overlay landscape traditions of Irish Sea cultures is their reflection in the Otherworld of archipelagic environmental entwinements of the elements on the islands. These subvert the realities of sea and land by the mutually reciprocal engagements of both, akin to Frye’s comments on the back-and-forth of human world and Green World in some Elizabethan texts influenced by those traditions (Frye 1967). The archipelagic environment helped shape a different kind of landscape from the more continental-oriented monumental and allegorised sense of Earth, associated with colonising regimes, that emerged from early Anglo-Saxon and Frankish cultures and was also reflected in the emerging Roman Catholic Church of the later Middle Ages. The archipelagic perspective by contrast was seen arguably also in Greek cultural and linguistic views of the cosmos, the sea-like patristic sense of the desert, and in encounters of foundational
Cappadocian Christian thinkers with the elemental entwinings of their jagged mountainous 'desert'. It remains significant today both because of our growing realisation that not only Europe but the Earth as a whole itself is an archipelago of entwined elements of land, sea and air, and also because of the current environmental need by world cultures for such models of melding global and indigenous worldviews.

Eriugena (1987), following on Christian scriptural references, referred to theophanies in nature as cloud-like, a melding of human imagination and divine energies manifesting themselves in the mingling elements of Earth. Peter Hallward compared such Eriugena imagery, with its roots in early Irish Sea cultures, to the postmodern geophilosophy of Deleuze and Guattari (Hallward 2006). Their 'bodies without organs', like Eriugena's theophanic clouds, suggest a melding of imaginative and physical reality that can be compared to Gregory of Nyssa's music. For Deleuze and Guattari, double-enfolded landscapes, such as the overlay traditions here described, change the cultural formation of desire spatially: From the common equation of desire with lack in the analogy-driven landscapes of the West to a relational sense that we can think of as symbolised by meditative chanting, such as in the desert tradition of hesychastic prayer - known today as the Jesus Prayer, liturgy or song (Siewers 2009).

Such a figure of chanting or music conveys the sense of participatory energy, as distinct from dyadic analogy, discussed above in relation to the cosmology of the overlay landscape. Music can include a melding of sign and physicality, metonymic in a similar way to the famous example of the Greek term pneuma for 'spirit', 'breath' and 'air', akin to the overlay landscape's entwinement with both physical world and text. A cosmic music as a figure of the pansemiotic appropriately figures large in pre-modern cosmologies associated with early Irish Sea Christian cultures, as in for example the book of the Wisdom of Solomon in the Septuagint: "For the elements were changed in themselves by a kind of harmony, like as in a harp notes change the nature of the tune, and yet are always sounds" (19:18 LXX, cited in Brenton 1851). St Gregory of Nyssa's exegesis of the Psalms states: "The order of the universe is a kind of musical harmony of varied shapes and colours with a certain order and rhythm... the song woven together with divine words" (Gregory of Nyssa 1994b). Likewise, in indigenous traditions, an Ojibway creation story similarly entwines music and the cosmos in a kind of overlay landscape associated with imagination:
The Creator sent his singers in the form of birds to the Earth to carry the seeds of life to all of the Four Directions. In this way life was spread across the Earth. On the Earth the Creator placed the swimming creatures of the water. He gave life to all the plant and insect world. He placed the crawling things and the four-leggeds on the land. All of these parts of life lived in harmony with each other. Gitchie Manito then took four parts of Mother Earth and blew into them using a Sacred Shell (Benton-Benai 1988, 2).

In The Voyage of Bran, a description of the insular Otherworld in terms of the biblical Tree of Life of Paradise notes that:

There is an ancient tree in blossom there on which the birds call to the Hours, it is in harmony usually that they all call together every Hour. Colours of every hue shine throughout the smooth familiar plains; joy is continuous, together with music (Mathúna 1985, 47).

The Navigatio Sanctis Brendani features a similar sense of cosmic song (Selmer 1989). This pre-modern idea of the cosmic landscape as ultimately pansemiotic, in signs that form an energy infusing the material world described in musical terms, was picked up by modern fantasy in the works of J.R.R. Tolkien and C.S. Lewis, both medievalists. Tolkien (1977, 1) in the elvish creation story for his Middle-earth wrote of the elves' creator speaking to created spiritual beings thus:

Then Ilúvatar said to them: “Of the theme that I have declared to you, I will now that ye make in harmony together a Great Music... ye shall show forth your powers in adorning this theme, each with his own thoughts and devices, if he will.”

Lewis (1998, 42), too, wrote of the creation of his world of Narnia:

[...] it was the stars themselves which were singing, and... the first voice, the deep one, which had made them appear and made them sing.

In its geography some have seen the hills of Lewis' native County Down in Ireland (Duriez 2005) and it is ultimately described as an extension or overlay of the Earth's landscape in the transfiguration of the Earth at the end of the Narniad.
the form of birds to the Earth of the Four Directions. In this earth. On the Earth the Creator of the water. He gave life to He placed the crawling things. All of these parts of life liveditchie Manitosthen took four into them using a Sacred Shell

describes a similar sense of cosmic song of the cosmic landscape as ultimate an energy infusing the materials picked up by modern fantasy in Lewis, both medievalists. Tolkien for his Middle-earth wrote of the primal beings thus:

the theme that I have declared in harmony together a Great your powers in adorning this sights and devices, if he will.

ation of his world of Narnia:
which were singing, and... the hill had made them appear and

hills of Lewis' native County it is ultimately described as an landscape in the transfiguration of

Ecopoetics and Environmental Fantasy

As songs shape the cosmos in this tradition, so too, in overlapping significance, stories comprised of cosmic signs beyond human language suggested by the multiple meanings of the Greek Logos uniting 'harmony' and 'story' form it. Indeed, story is one translation of the Greek Logos, which through Christian interpretation of Genesis 1–3 also became identified with ickon or image. The distinctive imaging of God by human beings includes the naming of non-human beings, a kind of metonymic storytelling or poetics. The cosmic poetry of Genesis 1 itself forms the story of creation that also shapes Creation in God's words or the logoi of the logos. The term ecology itself in its etymology can be read as 'the story of home', or, in this non-Augustinian and pre-Scholastic patristic Genesis tradition, 'the image of home': An equivalent for overlay landscape in the premodern traditions here described. Such a three-dimensional or iconographic sense of narrative conveys what Thompson (2007) finds in ecopoiesis (literally a shaping of ecology) entwining human subject and nature — 'laying down a path while walking' — the reciprocal shaping of the human mind in empathetic relation to ecosystem. Such iconographic landscape-narrative involves the triadic landscape, metonymy, timeplexity and grounded ethos that define ecopoetics, as adapted both from Heidegger and these pre-modern models.

This narrative overlay landscape as a source of triadic space reflects in certain respects also the rhizome used as an organic cosmic image by Deleuze and Guattari (1987) for the entwinement of imagination and physicality, an image of a grass root they set in contrast to a Western arboreal master image of hierarchy in culture. Yet the overlay landscape as ecopoiesis in cosmopolitan patristic Christian traditions involves an entwinement of the transcendent and the immanent, the global and the indigenous. It embodies a distinctive incarnation-panentheism that eschews both a Platonic transcendence and an ethno-centric local attachment to matter that would idealise or objectify nature respectively. Instead, the insular overlay tradition is reminiscent of the Old Norse cosmic tree, Yggdrasil (itself like early Irish Otherworld stories known to us from an archipelagic Christian milieu). Both branches and roots, in many realms all arrayed around Middle-earth, it has parallels in images of trees in Celtic-language and continental shamanistic cultures. That cosmic tree, identified in Erigena's writings and in Greek exegesis by St John of Damascus and others, with the Tree of Life and the Cross, with the Logos with branches of logoi, melds the rhizomic and the arboreal, the indigenous and the global. The 'Every Tree' of
Eden was interpreted as the 'All Tree' by Greek fathers and Eriugena (Eriugena 1987). Thus the multiplicitous yet linked 'Every Tree' of Eden, a place described as a mountain encompassing the Earth by St Ephrem the Syrian and St Gregory of Nyssa in perhaps the prototype for the Otherworld tradition (Ephrem 1997), is distinguished from the stand-alone and isolating Tree of the Learning of the Knowledge of Good and Evil (following the Septuagint's wording), in which self-knowledge is an abstraction, an objectification of nature and self, a removal from Eden and cosmic connectedness, at least when its fruit is consumed immurely and distinguished from the 'All Tree'.

It is this incarnational-yet-transcendent sense of landscape as process, landscape as overlay, which ultimately distinguishes pre-modern traditions of the overlay landscape discussed here (even as re-imagined by Tolkien and Lewis), in their Green World, from the cyber world of technological globalisation (Edwards 1995). They display a phenomenological personalism in their intersubjectivity lacking in the Epicurean-inspired atomism and infinite space of Phillip Pullman's (2007) scientifically based fantasy cycle His Dark Materials. The latter's anti-Green-World fantasy of multiple realms and interiorised daemons indicates how even what appears to us today as environmentally oriented can be nonetheless primarily allegorical and compromised by technological metaphysics. Pullman's fantasy worlds engage a modern secular re-reading of Paradise Lost, which even in Milton's original Puritan and quasi-Arian Protestant milieu was closer to the interiorised allegory of Dante than to indigenous traditions of landscape in the early Irish Sea ecosphere of the Otherworld/Green World.

Thus Tolkien's Middle-earth remains Earth-centred while that of Pullman's, writing a few generations later, in a more technologically virtual milieu and in a more environmentally damaged planet, depicts multiple worlds in which there is no link to a framing environment of Earth. We are left, in effect, with the 'disposable Earth' view promoted today by Hawking and some other scientists: As we wreck the Earth, there will be other worlds to conquer through space colonisation (Dernott 2010). We see this even in James Cameron's self-proclaimed environmental parable Avatar, in which the Earth is environmentally destroyed and we can only view an eco-friendly culture through 3D-glasses on another planet, thanks to a purported US$250 million production budget (Keegan 2009).
Conclusion

The merging landscapes of Estonia in my travels between the Dormition women’s monastery, Tartu’s Semiotics Department, and Tallinn’s mix of medieval walled city with casinos and bustling Baltic capitalism, revealed for me a melding of ecosemiosphere in sharp contrast with the Frankfurt airport of my journey back to North America. The international air hub exemplified a vision of placeless globalisation at odds with the very concept of ecosemiosphere that was present even in the copy of Tolkien’s fantasy cycle in my luggage. While Pühittisa and Tolkien’s landscapes separate out from one another on one level as physical and textual, they both share a heavily articulated triadic semiosis or (in the old Greek sense of Logos) harmony, or (in Peirce’s term) agapism, shaping for both an otherworld of landscape focused on Earth. There is the story [Sign], the physical landscape it overlays [Object], and the relational tradition in which subjectivity forms [Interpretant]. In the case of Pühittisa the physical Object expresses a meld of stream, tree, hill and community. In the case of Tolkien, Middle-earth is also our Earth in past enchantments, reminiscent of Heidegger’s definition of Earth as mysterious withholding from the world that nonetheless helps to shape a meaningful world [Foltz 1995]. Then there is the Interpretant, the meaning or law or context or tradition that of the identification of the Theotokos with the Earth, and of the elvish fantasy history of Tolkien as modern-day adaptation of the Green World [Siewers 2005b]. In terms of qualities of ecoscopetics outlined earlier, both ecosemiospheres involve time-plexity, an environmentally grounded sense of ethos, metonymic signs and triadic landscape. Metatextually their semiosis relates them with landscape — Middle-earth being a kind of fairyland of Europe expressing Heideggerian regioning of Earth, Pühittisa its countryside linked to tradition.

Yet the difference between them and the work of Pullman or the landscape of the Frankfurt airport may not result primarily from intentional philosophy so much as from passage of time. Nature arguably became more virtual and human culture further removed from longer-term traditions of rural life throughout the twentieth century, with both more entwined in a globalised consumer approach to the environment, whether capitalist or socialist. In this sense, an observation by Kalevi Kull [1998, 358], “biodiversity is directly dependent on community age”, applies to traditions of storytelling expressed in literature, Biblical, indigenous, and pre-modern literary traditions, often overlooked in contemporary environmental studies, may yet inform present-day narratives of ecological restoration in our ‘post-financial-crash’ world.
Pre-Modern Ecosemiotics...

From within European and Mediterranean traditions, elements of older ecosemiospheres may help to build coalitions for ecological renewal, as seen for example in the appeal of Tolkien's work across political and religious boundaries from eco-anarchists in England to evangelical Protestants in America. Previously hidden aspects of earlier ecosemiospheres such as the early Irish Sea can help us shape our own semiospheres (realms of meaning) environmentally as the old West adjusts to new economic and environmental realities.

In the process, such traditions can explicate the relationships not only between ecosemiotics and ecopoetics sketched above, but also between the phenomenological experience of place suggested by Heidegger’s fourfold (Earth, sky, mortals, gods) and the elements of ecopoetics (triadic landscape, metonymy, time-plexity, grounded ethos). As Graham Harman (2007) has noted, Heidegger’s fourfold as an explication of place-event (as opposed to objectified place) remains a lacuna in much interpretation of the philosopher’s contribution to environmental philosophy. Yet Harman’s explication suggests the relation of Heidegger’s fourfold with the four aspects of ecopoetics delineated above in *Imram Brain* and other pre-modern texts. The Earth as concealed but non-specific parallels the triadic landscape of ecopoesis, which across cultures suggests the mystery of our relation with the Earth, as in *Imram Brain’s* evocation of the Otherworld in known contiguous geography of the archipelago. The sky as a kind of revealed yet specific measure of Earth reflects the metonymic imagery of ecopoetics, as in the sea of the Irish coast as a metonym for monastic desert and Paradise in *Imram Brain*, *Navigatio Sancti Brendani* and other texts. Mortals as a non-specific condition form a mode of Heidegger’s fourfold that reveals time-plexity through their condition, as with members of Bran’s crew. And gods conceal a specificity that relates to an ethos of place, as in the need to respect and not objectify the nonhuman conditions of the Otherworld as the ‘other side’ of nature in Bran’s journeys, seen in the figure of the sea god in the story. This all also recaptures the old sense of ethos as place. In addition these fourfold overlapping models, suggestive of eco-semiosphere, relate to Peirce’s triadic semiosis, in terms of Earth as Object, sky poetically as Sign, and mortals and gods together symbolising the Interpretant of tradition.

When I returned from Estonia, I encountered another story-shaped world in North America, at a meeting with Tadodaho Sid Hill, the spiritual leader of the Haudenosaunee or Iroquois Confederacy of native peoples in North America. The Iroquois are recognised as sovereign nations with certain legal boundaries and rights by the United States.
mean traditions, elements of older traditions for ecological renewal, as well as the work of political and environmentalists in England to evangelise aspects of earlier ecosensory knowledge that help us shape our own semiotically as the old West adjusts to new realities.

In explicating the relationships not only between the parts of traditions, but also the sense of place suggested by myth and the elements of tradition, Heidegger’s fourfold as an initial objectified place remains a key philosopher’s contribution to understanding. Human’s explicatory suggestions the relation between the parts of ecosensory and modern texts. The Earth as a triadic landscape of ecosensory, mystery of our relation with the Iroquois Confederacy on the US Constitution. However, surprisingly to the group, the greatest flaw he cited in the latter was the separation of church and state. Yet his comment reflected not a legal constitutional standpoint but a perspective on cultural narratives. To paraphrase directly, he said: “You have no traditions of stories of the land as a community of peoples.”

One recent effort involving my university and the Haudenosaunee seeks to apply some of the ideas in this essay to environmental restoration. Drawing on historical research, GIS mapping technology, literary research and environmental journalism, a consortium of groups has developed a proposal for a national historical trail along the four-hundred-and-forty-mile-long Susquehanna River, which was once a prime corridor between the heartland of the Iroquois lands and the Chesapeake Bay. Both the Susquehanna and the Chesapeake continue to face severe environmental challenges. Designation of the corridor, which has received an initial positive response from the National Park Service and currently remains under review, could be an opportunity to connect people in the Susquehanna Valley through stories of the region with their shared watershed ecosystem, in a public-private national park corridor.

In another example of applied environmental humanities, which I covered as an environmental journalist, the Chicago Wilderness movement has drawn on pioneer narratives and study of Native American land management, as well as of early Midwestern natural history to help shape large-scale ecological restoration efforts in a metropolitan area involving prairie, savannah and wetlands (Siewers 1998). To do this sometimes controversial work, supporters drew also on local naturalistic adaptations of the City Beautiful movement that left their mark on earlier boulevards and park corridors in the metropolitan area, seeking...
to situate the new restoration efforts within that local landscape culture as well as within the region's history. In the future, the developing field of ecosemiotics, drawing also on historical and non-modern traditions, will probably find new ways to combine ecopoetic phenomenology of landscape with ecological restoration in 'stories of home'. In doing so, it will highlight the ongoing power of human story to engage reciprocally with ecosystems in potentially shaping sustainable ecosemiospheres.

Notes

1 The Otherworld is a modern term often used as scholarly shorthand for a trope found with variations in early Irish and Welsh literatures. Although any unitary sense of the concept in early medieval times is contested, the presence of such an overlay landscape in all major Irish Sea literatures is distinctive (Sims-Williams 1990, 67; Carey 1991; Siewers 2009, 85-87).

2 His discussion of cosmic harmonies as energies also parallels that in the deuterocanonical book of the Wisdom of Solomon; later the sub-Roman Latin Christian philosopher Boethius also described cosmic harmony in musical terms, but emphasised it more in proto-Scholastic terms as inherent in Creation rather than creational energy as in the Greek discussion.

3 Lynn White, Jr [1973a, b] famously implicated Christianity in environmental destruction in the West. Yet in a follow-up essay he qualified this by limiting his thesis to dominant Augustinian and Scholastic Western interpretations of Christianity.

References

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