

## **Cultural Ecology and Cultural Framing**

(manuscript not intended for publication)

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The cultural focus of this workshop, and of the new research network as a whole, marks a shift away from the ecocentric, nature-oriented approach of much previous environmental debate to the crucial issue of nature-culture interaction. A very similar shift is at the core of the discipline of cultural ecology as it has emerged in the last two decades, particularly in Germany. The term ‘cultural ecology,’ it should be noted, has been used for a variety of approaches after it was coined by the anthropologist Julian Steward in the 1930s to describe the ways in which cultures change by adapting to their environment. Today it is mainly used by theorists who study the structural and functional analogies between natural and cultural systems, and the role of discourse in the shaping of the cultural ecosystem. I would like to present the work of the two most influential and, it seems to me, most innovative theorists of cultural ecology in Germany, Peter Finke and Hubert Zapf. My outline will focus on the relationship between cultural ecology and cultural framing as described in the workshop notes, and specifically on the role of the arts in this relationship.

## **1. Evolutionary Cultural Ecology (Peter Finke)**

The inter-discipline envisioned by Finke, evolutionary cultural ecology, is based on the assumption that culture—which Finke defines broadly, following systems theory and the ecologist John Tyler Bonner, as everything that is organized by sign-based communication (Finke, “Die Evolutionäre Kulturökologie” 185)—is functionally and structurally analogous to ecological systems. Functionally, human beings are interrelated with all the cultural factors in their society just as they (and all organisms) are interrelated with all the other natural factors, biotic and abiotic, in their habitat. At the point in evolution when animals developed a psychic dimension, Finke argues, culture emerged as a way of organizing those aspects of life engendered by the new, interior dimension. Just as nature makes possible, diversifies, and maintains the physical life of human beings, culture makes possible, diversifies, and maintains their psychic life.

Structurally, Finke draws an analogy to the cycle of production, consumption, and reduction that characterizes natural ecosystems. Instead of chemical elements and genetic replication, however, cultural ecosystems use sign-based information and what Richard Dawkins conceptualized as ‘memetic’ replication. Or, even more generally, where natural ecosystems consist of material elements and natural signs, cultural ecosystems consist of immaterial elements and symbolic signs. Instead of biomass, cultures produce (acquire), consume (learn), and reduce (compress or forget) information. They follow rules that have emerged in evolutionary processes, even though these rules, or conventions, give the individual more leeway for deviation than do the laws of nature. In brief, proponents of evolutionary cultural ecology argue that cultures are not just embedded in ecological networks, but that they are themselves a kind of ecosystem.

Finke argues somewhat optimistically that ecosystemic processes provide models for cultural development and human behavior in that they are healthy, productive, and geared toward the physical and psychic well-being of all life-forms involved. From this idea he develops an ethics of cultural sustainability. Since cultural systems function analogously to nature, he says, we need to care for them the way we care for nature. We need to maintain cultural diversity, remain open to advantageous innovations, to “organize our cultural relations ... cooperatively by creating win-win situations” (“Die Evolutionäre Kulturökologie” 197).<sup>1</sup> Following Gregory Bateson (*Steps* 470-481), the founding father of cultural ecology as it is understood today, Finke posits that nature provides a number of “universals”—such as creativity, diversity, openness, flexibility, permeability, and cooperation—that maintain the system by keeping it dynamic and open. He argues that culture can and should adopt these universals to ensure its own survival, and he proposes a “maxim of intelligent nature-orientation” to the effect that our cultural decisions should be based, where possible, on similar processes in nature. “If there is a cultural problem,” he says, we should “first of all ask if nature knows a structurally similar problem and how she has solved it” (2006: 198, my trans.)—not in a one-to-one translation, but taking into account the cultural and ethical principles that derive from the abovementioned universals.<sup>2</sup>

This summary, I hope, already indicates the relevance of Finke’s approach for questions of environmental discourse. Given his straightforward argument that cultural and natural systems function analogously, Finke can posit fairly clear criteria for the organization of cultural discourse (his ‘universals’), and he can base his criteria on his empirical observations about these systems. Whether these observations are convincing,

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<sup>1</sup> Finke’s work is not yet available in English. All quotations from Finke are my translation.

<sup>2</sup> This passage and some others taken, with slight modifications, from my article on recent developments in cultural ecology (Müller).

or maybe rather selective, is open to debate. For now, I would like to draw attention to two specific aspects of Finke's approach, both of which relate to the question of cultural framing: first, his conception of metaphor as a framing device; and, second, his remarks on the role of the arts in evolutionary cultural ecology.

## **Metaphor**

A biologist by training, Finke nevertheless points out that all science relies on metaphors, even where we do not notice it anymore. Even in physics, which tends to regard itself as the typical 'hard' science, we have a host of 'entrenched' metaphors: force, tension, friction, resistance, and so forth. These metaphors, Finke says, are "good metaphors" because "they extend or improve our knowledge compared to the status quo; bad metaphors are those that do not have this effect or even the adverse effect" ("Misteln" 49). Rather than regarding truth as a "host of moveable metaphors" in a Nietzschean-poststructuralist vein, he regards metaphors as a means of arriving at truth. "When a good metaphor is found," he says, "this is a lucky event for research or learning, which may receive a fresh impulse after a phase of stagnation and exhausted methods. In research, it can suddenly open a path to further links of knowledge that was closed before" ("Misteln" 50). As in his general argument, Finke has clear notions of how metaphors can and should contribute to environmental discourse. Their role is to improve our knowledge of the natural world and to deepen our understanding of it. And if metaphors, as he assumes, are bound up with truth, if they relate to the extratextual world in relatively stable ways, they become measurable. We can look at the history of physics, for example, analyze the metaphors that were used in this discipline, and judge whether these metaphors helped the discipline's understanding of the empirical phenomena it tried to explain. In the cultural sphere, the standard against which Finke measures metaphors derives again from the 'universals' he posits. He and his co-

workers have published analyses of various areas of discourse—political, economic, academic—from this perspective (Yüce/Plöger).

## Arts

In a recent introduction to his theory, Finke acknowledges the importance of art for today's cultural ecosystems. Some of the 'universals' of ecological communality, he indicates, are inherent to and provided by art: creativity, individuality, and freedom from societal restrictions. In this vein, Finke alludes to the concept of art as a 'depragmatized' mode of negotiating social reality (cf. Iser 109), which is central to Zapf's approach, and claims that it is its resistance to dominant fashions and forms that makes art valuable, while art that is exploited for such fashions is "quickly devalued ... to become craft or kitsch." From his short discussion of literature in this context, we can infer several cultural-ecological functions of literature. One such function, perhaps the major one, is that of cultural criticism. "The close link of all culture with language makes literature the outstanding instrument for educating our cultural imagination," Finke says, and he singles out "cultural potentiality" and "cultural diversity" as aims of this education ("Die Evolutionäre Kulturökologie" 207-209). This type of cultural-ecological function, it seems, mainly occurs on the level of content. By means of the stories it tells, literature can dramatize and devalorize non-ecological forms of communality and offer alternatives, or at least a critique of unviable forms. Take, for example, this description of a small-town community from Harper Lee's bestselling novel, *To Kill a Mockingbird* (1960):

There was indeed a caste system in Maycomb, but to my mind it worked this way: the older citizens, the present generation of people who had lived side by side for years and years, were utterly predictable to one another: they took for granted attitudes, character shading, even gestures, as having been repeated in each generation and refined by time. Thus the dicta No Crawford Minds His Own Business, Every Third Merriweather Is Morbid, The Truth Is Not in the Delafields, All the Bufords Walk Like That, were simply guides to daily living;

never take a cheque from a Delafield without a discreet call to the bank; Miss Maudie Atkinson's shoulder stoops because she was a Buford; if Mrs Grace Merriweather sips gin out of Lydia E. Pinkham bottles it's nothing unusual—her mother did the same. (145)

In a few words, this community is presented as a microcosm characterized by repetition and ossification. The description of how formerly individual traits are inherited down the line and come to define an entire family indicates both evolutionary and social forces and thus supports the notion that this cultural sphere has an ecosystemic aspect to it. However, the “utter” predictability of the evolution and the insistent, repetitive tone in which it is described give the passage a critical twist. We are invited to imagine the constraints every individual of these families must feel in a community that does not allow for individuality, change, or escape. The fundamental ecological principles of flexibility and diversity are repressed and stultified in this cultural ecosystem. But the novel offers an alternative perspective as well: the narrator, a young girl from a liberal family, observes shortly after the passage quoted here that people who fit into the world of Maycomb never fit into her and her family's world. Wondering about her aunt's affinities with the Maycomb world, she says, “I so often wondered how she could be Atticus's and Uncle Jack's sister that I revived half-remembered tales of changelings and mandrake roots that Jem [her brother] had spun long ago.” Again she is thinking a social entity, in this case her family, in terms of nature and biology. (Her closeness to the natural world is a leitmotif of the novel.) She turns the definitory pattern of the Maycomb community on its head by labeling her aunt, an exemplary member of the community, as the deviant of her family. Once she has arrived at this diagnosis, she tries to account for it in biological terms and comes up with highly imaginative explanations—tales of changelings—that persist on the margins of this stultified ecosystem but that nevertheless hold a potential for creative redefinition.

The example also points toward a second function literature might have in the context of evolutionary cultural ecology, and one that touches directly on the issue of cultural framing. Not only can it measure a cultural system against the “universals” provided by ecology; it can also sensitize us to the ecological patterns, the “webs” (Capra), that underlie even the most unnatural cultural formations. This ecocentric reframing, as we might call it, is evident in the very title of Harper Lee’s novel: when the narrator and her brother get air rifles for Christmas, they are told that it is a sin to kill a mockingbird. “Mockingbirds don’t do one thing but make music for us to enjoy,” explains a neighbor. “They don’t eat up people’s gardens, don’t nest in corncribs, they don’t do one thing but sing their hearts out for us” (Lee 99-100). The children interiorize this principle and later apply it to humans as well. Thus, the prime ethical imperative of the novel, one that generations of schoolchildren have been taught in the United States, derives from an ecological principle: never harm the things that do you good, never destroy the environment that enables your existence.

From a literary studies perspective, this second function appears rather one-dimensional in its didacticism. The first function, however—literature as cultural criticism from an ecological perspective, and pointing to ecological alternatives—is at the core of another approach to cultural ecology that comes from within literary studies: Hubert Zapf’s model of ‘literature as cultural ecology.’ which I would like to present in the remainder of my talk.

## **2. Literature as Cultural Ecology (Hubert Zapf)**

Zapf’s model is based on the assumption that “literature acts as an ecological principle or an ecological force within the larger system of its culture” (*Literatur* 3, my trans.). In other words, literature negotiates cultural developments and their effects on the human

being within nature, and it produces knowledge that can help cultures restore the balance with nature that they need in order to survive. It does for the interior, the psychic dimension of human beings—the dimension Finke sees as constitutive of culture—what the discipline of ecology does for their exterior, physical dimension. The processes and solutions of this literary ecology are different, of course, from those of biological ecology. They do not always start from concrete problems, nor do they offer concrete solutions or a course for political action. Rather, they work within the enormous reservoir of the collective imagination, where they represent and overcome these problems symbolically, and thus change indirectly, in the long run, the way we think about both nature and culture. In the terms of our workshop, they frame our notions of our natural environment—not in the sense of a fixed definition but of a continuous process of negotiating existing frames and proposing new ones.

This kind of framing/reframing activity can arguably be found in various disciplines and discourses. Zapf gives two reasons why it is particularly powerful in literature. For one thing, like Finke, he adopts the Iserian notion that literature operates in a ‘depragmatized’ mode: since it makes no referential truth-claims, it does not need to meet the logical and factual expectations that delimit other discourses (Iser 109). It can be more open and more daring in its exploration of cultural structures. Its imaginative element dissociates literature from the narrow lanes in which much of our thinking and writing takes place: in Zapf’s words, it “transforms conceptual, logocentric processes into energetic processes” (“Literature and Ecology” 3). Secondly, Zapf argues that literature has special affinities with ecology. Densely written aesthetic texts have a more complex structure than most other kinds of texts. In relying centrally on the multidimensional processes of interconnection, association, and imagination, they reflect the absence of monotone values in nature and enact what Barry Commoner has



called the “first law of ecology”: “everything is connected to everything else” (Commoner 33-39; Bateson, *Mind and Nature* 50).

Specifying his claim that literature has an ecological function within the cultural system, Zapf argues that every literary text potentially conducts three distinct, simultaneous modes of ecological negotiation:

(1) The representation and critical balancing of typical deficits, contradictions and deformations in prevailing political, economic, ideological and utilitarian systems of civilisatory power. These systems are depicted as often traumatising forms of human self-alienation, which, in their one-sided hierarchical oppositions between culture and nature, mind and body, power and love, lead to death-in-life situations of paralysed vitality and psychological imprisonment (this could be described as the function of a *cultural-critical metadiscourse*).

(2) The confrontation of these systems with a holistic-pluralistic approach that focuses specifically on that which is marginalised, neglected or repressed by these systemic realities, and articulates what otherwise remains unarticulated in the available categories of cultural self-interpretation. In this way, literature activates and semiotically empowers the culturally repressed as a source of its own creativity, reflecting it up from the amorphous depths of the collective unconscious to the surface of cultural consciousness and communication (= the function of an *imaginative counter-discourse*).

(3) The feeding back and reintegrating of the repressed into the whole systems of cultural discourses, by which literature contributes from the margins to the continual renewal of the cultural centre. This reintegration is by no means to be seen as a superficial harmonisation of conflict. On the contrary, the bringing together of the culturally separated spheres characteristically sets off highly turbulent and conflictual processes, which can produce catastrophic results, but which also appear as necessary catalysts for the renewal of cultural creativity (= the function of a *reintegrative inter-discourse*). (Zapf, “Literature as Cultural Ecology” 94; cf. Zapf, *Literatur* 63-68)

In Zapf’s reading of *Moby-Dick*, for example, Captain Ahab and his whaling-ship are an instance of cultural criticism (the first function) because they stand for political and economic expansion at the expense of nature. Ahab projects his desire for power and control on the white whale, but as the whale eludes him, it comes to represent symbolically the larger forces that transcend and contain our desire for dominance:

nature, creativity, the subconscious, the savage, and so on (the second, imaginative-counterdiscursive function). The novel dramatizes these antagonistic forces in ever new constellations, and in the end it stages the direct confrontation of Ahab with the whale, which results in disaster for Ahab and the ship, but at the same time depicts different, symbiotic ways of living together, for example when Ishmael is saved by Queequeg's coffin, and later by Captain Gardiner (the third, reintegrative function) (Zapf, *Literatur* 93-112).

These three discursive functions, it seems to me, are analogous with the three different ways literature takes part in cultural framing. It subjects existing frames to critical scrutiny (this corresponds to Zapf's 'cultural-critical metadiscourse'); it proposes new frames developed through and against this critical view (the 'imaginative counterdiscourse'); and it dramatizes the conflict between the restrictive frames of the existing cultural system and the alternative frames adopted, for example, by ecologically-minded groups or individuals (the 'reintegrative interdiscourse'). While 'discourse' and 'frame' are sometimes used synonymously in frame theory, however, Zapf's 'discourses' do not seem to correspond to cultural 'frames'; rather, he uses the term for patterns of cultural reflection *on* such frames.

## **Metaphor**

The central role of narrative literature in Zapf's model is obvious, and arguably this role can also be fulfilled by other forms of art as far as they have a narrative element and are fairly concrete (e.g. poems or paintings). The second aspect I emphasized in my discussion of Finke's evolutionary cultural ecology, metaphor, has also been addressed by Zapf. For one thing, the cases studies in his writings on literature as cultural ecology indicate that metaphors are important devices in the three discourses he sees at work in literature. Like other figures of speech in which historical realities or abstract concepts

are condensed and imaginatively enriched, metaphors such as the whale-ship or the floating coffin in *Moby-Dick* function as ambiguous, complex nodes of the text's interrelations with its cultural environment.

On a more general plane, however, cultural ecologists from Bateson on have pointed to the affinities, or even analogies, between metaphorical and ecological thinking. Both are relational, Bateson argued, and assume analogies between heterogeneous spheres, especially between the spheres of nature and culture. In an essay on "Metaphors of Literary Creativity" Zapf endorses this argument and links it with the research of leading cognitive scientists such as George Lakoff and Mark Turner. According to Lakoff and Turner metaphors structure our everyday language and thought. They are a ubiquitous and fundamental influence on our thinking. Zapf endorses this view because it strengthens the link posited in his model between imaginary texts and their cultural environment. Metaphors, he says, "are not just ... rhetorical embellishments of rational argument but form a constitutive element of human discourse and knowledge." In a second step, he follows Bateson's lead in arguing that "metaphoric rather than logocentric speech" corresponds "to the interrelational, dynamical, and metamorphic world-view" of cultural ecology (Zapf, "Metaphors" 263). In bringing together images and ideas from separate cultural spheres, metaphors do on the micro-level of language what, according to Zapf, literary texts do in the cultural system.

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