

Paper Title: Technonative Visions

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Abstract:

Textual rereadings and translations are familiar practices in literary studies, philosophy, and theology. Textual rereadings may or may not result in culturally specific interventions in nature as well as culture. The point is to get at how the lived worlds are made and unmade, in order to participate in the processes; to reconfigure what counts as knowledge, 'a good life'. Technoscience is a term that tries to name the mutations in chances of life and death for all organisms on the planet. Donna Haraway and Bruno Latour are my guides to technoscientific world, where not all translators are human, where not all machines are 'dead', where an autonomous liberal subject is an extinct species, where distributed cognition is rather a rule than an exception. And where *communicatio idiomatum* is a daily practice, not an obscure technical term from the history of theology.

Keywords: Donna Haraway, Bruno Latour, technoscience, biosemiotics, translation, distributed cognition, exchange of attributes.

Biography:

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Paper:

1. *Separating*

Part of the task of theology is to know how humans and others should be represented and understood, so that salvation-message could be applicable to them. Most of Christian tradition has restricted itself to humans, and even within humankind quite strict separation has been between „us“ and „others“. But even the greater gap was between the humans and nonhumans: things and nature can be treated as merely given, as the phenomena that can be studied using natural-scientific method, while the humans cannot be treated as merely given because humans are distinguished by language, culture, active agency on the other (nature), rationality, freedom, etc. – all the ideas which have been associated also with the theological concept of *imago dei*. But relationality – important part of *imago dei* – has been downplayed often both in sciences and theology.

The environmental movement has achieved among other things, that concepts and questions connected to nature and environment have been given a particular relevance. Nature has become a co-creator of histories of economics, e.g. However, it is not always clear which nature and which conceptions of science should be used either in environmental movement and ethics, or environmental or creation theology. In this matter, even the science of ecology is not of much help, as it is not a unitary science (although it may present itself as a kind of ultimate truth). Ecology is not synonymous with nature, and may become synonymous with

an ideology. E.g. Anna Bramwell describes one of the paradoxes of the environmental movement – namely, that its invitation to moral and individual truth has ended in a global religion. And that it is a religion which is profoundly negative and anti-human:

Despite its rejection of organized and traditional Christianity, the ecological movement still carries the burden of its heritage, the legacy of the crucifixion, symbol of death, suffering and self-surrender. What after all today's ecological movement is advocating is a return to isolation. ... For today's ecologists, their hope of regeneration presupposes a return to primitivism, and thus, whether they wish to enunciate it or not, concomitant anarchy, the burning before the replanting, the cutting down of the dead tree. The father of the movement is an utter rejection of all that is, and for at least three millennia all that was.¹

For Bramwell, the ecological movement thus poses a threat to Western rationality. It represents an appeal to „go native“, to return to how humans once were and how nature still is. Bramwell wishes to rescue culture from nature and an assumed anti-human ecology. Even worse, ecologists had „hidden motives“, personal values (like love for the earth and animals). Science (in this case ecology) should be rescued from political ideology. Values must be separated from science; only in this way can ecology be a foundation for rationality, certain knowledge, progress, and culture.

Bramwell writes as an historian who opposes a much more popular trend in contemporary nature-thinking. Contemporary Westerners have tended to imagine that other cultures have a „richer“ and more benign vision of nature than we do. A great number of books and articles have been written to ridicule the miserable whites who are guilty of raping, mistreating, dominating, violating nature. The wretched objectivity of Western sciences has been contrasted with the timeless wisdom of „savages“, natives, who are said to „respect nature“, „live in harmony with her“, and plumb her most secret secrets, fusing their souls with those of things, speaking with animals, marrying plants, etc. Both ways effectively contribute in their own ways to reifying the division between culture and nature. Yet, as Bruno Latour reminds us, „Non-Western cultures *have never been interested in* nature; they have never adopted it as a category; they have never found a use for it. On the contrary, Westerners were the ones who turned nature into a big deal, an immense political diorama, a formidable moral gigantomachy, and who constantly brought nature into the definition of their social order.² In the Western tradition, nature has become an absolute, something to which policy must conform. Deep ecology has turned into shallow anthropology. We need anthropology of the contemporary, of the actual. We are not at home in our technopresent. I use Donna Haraway and Bruno Latour as my guides to our actual presence. Technonatives are not born, they are not purebreds, and it takes lifelong learning to become one.

2. *Connecting*

In the last 30 years or so, interdisciplinary studies of science, technology, sociology, anthropology, gender and race studies, environmental studies, history, semiotics, philosophy, cultural studies, studies of knowledge practices around the world have generated important new insights into evaluating ways of knowing. These analyses provoke controversies about the nature of knowledge, about the relations among science, technology, and other domains of

¹ Anna Bramwell, *Ecology in the 20th Century: A History* (New Haven and London: Yale University Press, 1989), 248.

² Bruno Latour, Catherine Porter, *Politics of Nature: How to Bring the Sciences into Democracy* (Harvard University Press, 2004), 43.

culture; about historical narratives, and about the possibilities of democracy, justice, and community in technoscientific, translocal worlds, about situated connections among humans and nonhumans, including both machines and organisms.

Technoscience, like globalization or some other term like these, try to name the mutations in chances of life and death for all organisms on the planet. Technosciences are the most active and powerful generators of new reality, of new objects to study and wonder at, the incubators of „facts“ about nature. Technoscience is a term that indicates the deep role instruments and technologies play in sciences, i.e. it refers to sensitivity to the concrete, to materiality, and does not view science as largely theory-producing activity. Technosciences result in technocultures and technonatures, technoscience is a fusion of science, organization, and industry, free market capitalism and politics, where humans and nonhumans are closely related.. Both Donna Haraway and Bruno Latour have argued for regarding natures and cultures as co-constituting, co-creating collectives, in contrast with human culture separated from the rest of nature. At stake is creating affinities, kinships, bondings, collectives to achieve a political contract between humans and nonhumans. Technoscience is a power engine behind our ever more rapidly mutating circumstances. Donna Haraway's cyborg is one of the figurations (also technosapiens, posthuman, post-subjectivist, material-semiotic) that intends to abolish the distinction between humans and technologies, animals and humans, physical and non-physical. In a lecture „Birth of the Kennel“ (August 2000) Haraway says:

As a person cursed and blessed with a sacramental consciousness and the indelible mark of having grown up Irish-Catholic in the United States, I'm saddled with a kind of indelible understanding that the sign is the thing itself. An implosion of sign and substance is part of living with a sacramental consciousness, the literalness of metaphor, the materiality of trope, the tropic quality of materiality, the implosion of semi-auticity and materiality always seemed the case about the world. Figuration is something also inherited out of that same tradition, as taking figures to be those who collect up and give back the sense of the possibility of fulfillment, the possibility of damnation, or the possibility of a collective inclusion in figures larger than that to which they explicitly refer.³

Her second manifesto⁴ (and the subject of aforementioned lecture), on companion species, is a case study on humans and dogs (not „human“ and „dog“ – Haraway herself always wants to retain historical specificity, so according to her, the cyborg is not a hybrid of any technology and organism, but the technologies started since 1960s. Similarly, not „dogs“ in general, but particular breeds and their trainers, owners, breeders, dog rescue activists, veterinarians et al. However, the cyborg is still a useful term to denote various intimate connections between humans and nonhumans). Contemplating an artifact, cyborg, a special kind of collective, one passes from science to technology, from technology to sociology, and from sociology to the history of religion or theology, not to speak of politics. Companion species figuration does some of the same work, and in many ways includes cyborgic relationships, (esp. reproductive technologies, but also cloning (the Missyplicity project, cloning of the dog, named Missy), surveillance technologies, educational and training technologies). Companion species are those with which we share meals, literally or

³ Donna Haraway, „Birth of the Kennel“ (lecture, European Graduate School, 2000)

<http://www.egs.edu/faculty/haraway/haraway-birth-of-the-kennel-2000.html>. Accessed 28.03.2005.

⁴ The first manifesto of Haraway was „A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late-Twentieth Century (1985), the second: *The Companion Species Manifesto: Dogs, people, and Significant Otherness* (Prickly Paradigm Press, 2003).

metaphorically, and they can dissolve the border between animal and human. Haraway notes that a willingness to engage with how our animal „others“ regard us drags us from western philosophy’s long-established delusion of the differentiated independent subject. „My work is an effort to explore the ways we create and participate in categories. We’re part of a crowd, with other species and environments. Nature is not something to define ourselves against, but rather something to be a part of.“⁵ Different perspectives open up different ways of being technonative. One could say even that some dogs (or other animals, cows, e.g.) make use of humans and their technologies in their reproductive practices. Relationship is the smallest unit one can study.

3. *Translating*

Haraway makes lots of use of semiotics vocabulary. Biosemiotics also tries to catch cultures/natures in the making, asking questions like: Are we capable of conversations with nature? *Talking with nature* has been often considered in an anti-scientific way – certainly to approach nature this way may cause fear, as expressed by Umberto Eco⁶. Yet – conversation with nature has a direct, non-metaphoric meaning, if (a) there exist signs besides the human signs, (b) it is possible to understand these signs, and (c) it is possible to restore these signs. This view has been expressed by biosemiotics: signs per se do exist in animal communication, or in any other communication among living systems.⁷ We can ask, whether an animal message can be translated into a human one? Can a human message be translated into an animal one? And can animals themselves do any translation?

Translating, as people do from one language into another, is usually a self-conscious process. Accordingly, most of literary translation theory stands within this framework. If applying the notion to unconscious processes, i.e., considering that there exists an unconscious translation, it becomes reasonable to distinguish between two main types of translation: biotranslation and logotranslation. There is no translating in the non-living. Logotranslation is conscious translating. But the biotranslation is still a process of the living. Every conscious translation assumes an unconscious component, i.e., even logotranslation assumes biotranslation.

The notions dead, living, and self-conscious (as well as signifying) – clearly very obvious and natural characteristics – are not liked by natural scientists when defining terms or building models. Biology, chemistry, and physics, when developing their theories, have been trying more and more to escape these notions, at the same time being led by a wish to explain them. Accordingly, in the history of natural science one can follow a clear trend towards replacing these terms with thermodynamic, molecular, and cybernetic ones, leaving death, life, consciousness and signification more and more with only a metaphoric status.

Admittedly, life and death, consciousness and signification and meaning are difficult terms to define via their mechanisms as normally done in biology. Biosemiotics attempt to move these categories back into use as operational terms. Yet, biosemiotics, while true to biology and semiotics, stop short of evaluation and it tend not to ask questions of ethics. The point is to get at how the lived worlds are made and unmade, in order to participate in the processes; to reconfigure what counts as knowledge, a „good life“. Textual rereadings are

⁵ Patrick McDonagh, „Nature, culture and inappropriate love objects“ :a quote from Donna Haraway’s lecture „We have never been human: companion species in naturecultures“, 17.02.2005 Moot Court at New Chancellor Day Hall. The McGill Reporter Vol. 37; 2004-2005, February 2005. Accessed <http://www.mcgill.ca/reporter/37/11/haraway/> 28.03.2005.

⁶ Umberto Eco, „On Semiotics and Immunology,“ in E. E. Sercarz, F. Celada, N. A. Michison, T. Tada (eds.), *The Semiotics of Cellular Communication in the Immune System* (Berlin: Springer, 1988), 15.

⁷ Kalevi Kull, Peeter Torop, „Biotranslation: Translation between *Umwelten*“, in Susan Petrilli (ed.), *Translation Translation* (Amsterdam: Rodopi, 2003), 315.

familiar practices in literary studies, philosophy, theology. Translations between different species (from one sign system to another) can be successful, at least partially (e.g. the human being and his/her cat; different species of plants on the flower-bed; different species of birds, or a predator and a prey who can coordinate their movements with a high level of precision, etc). Translation in this case is a transmission of meaning from one species to another (a generalized notion of translation).

In sharing the competencies of speech, association, and reality among humans and nonhumans, no one imagines addressing a black hole, an elephant, an equition, with the same ease as one may converse with a human friend. Yet, the conversations and translations are real – not even God speaks on God's own, but always through something or someone else. Every nonhuman that is a candidate for existence finds itself accompanied by a series of lab coats and many other professionals who point to the instruments, situations, and protocols, without our being able to distinguish yet who is speaking and with what authority, as Bruno Latour has noted.⁸ In a way one could say that all non-humans have found a way how to utilize humans as their speech prostheses. To limit the discussion to humans, their interests, their subjectivities, and their rights, will appear as strange a few years from now as having denied the right to vote of slaves, poor people, or women, prophesizes Latour.⁹

When the self of the potential translator is envisioned as an independent subject, grounded in presence, identified with originary guarantees and teleological trajectories, associated with solid foundations and logical coherence, the posthuman/cyborg is likely to be seen as antihuman because it envisions the conscious mind as a small subsystem running its program of self-construction and self-assurance while remaining ignorant of the actual dynamics of complex systems. But the cyborg does not really mean the end of humanity. It signals instead the end of a certain conception of the human, a conception that may have applied, at best, to that fraction of humanity who had the wealth, power, and leisure to conceptualize themselves as autonomous beings exercising their will through individual agency and choice. As Haraway says, „People are always already in assemblage with worlds. Humans are already congeries of things that are not us. We are not self-identical.“¹⁰ What is lethal is not the cyborg/posthuman as such (despite the origins of cyborg in the II World War, the Cold War space race, sci-fi entertainment events, etc.) but the grafting of the posthuman onto a liberal humanist view of the self. When Hans Moravec imagines „you“ choosing to download yourself into a computer, thereby obtaining through technological mastery the ultimate privilege of immortality, he is not abandoning the autonomous liberal subject but is expanding its prerogatives into the realm of posthuman. Yet the cyborg need not be recuperated back into liberal humanism, nor need it to be constured as antihuman. The cyborg offers resources for rethinking the articulation of humans with intelligent machines as well as other non-humans. The cyborg is a very useful critical figuration or trope or symbol. But certainly it is an ambiguous figure from its very origins: it can also comfort super-macho militant dreams of future or sort of bourgeois dreams of immortality. After all, space or time does not restrict human imagination, but one's own or one's species' death does.

Gregory Bateson had an intriguing idea that those organisms that survive will tend to be the ones whose internal structures are good metaphores for the complexities without. What kind of environments will be created by the expanding power and sophistication of intelligent machines? As many computer specialists have noted, in the information-rich environments created by ubiquitous computing, the limiting factor is not the speed of computers, or the rates

⁸ Latour, 75.

⁹ Latour, 69.

¹⁰ „Interview with Donna Haraway“. Participants: Randi Markussen, Finn Olesen, and Nina Lykke, in; Don Ihde and Evan Selinger, *Chasing Technoscience: Matrix for Materiality* (Bloomington & Indianapolis: Indiana University Press, 2003), 54.

of transmission through fiber-optic cables, or the amount of data that can be generated and stored. Rather the scarce commodity is human attention.

Just as the posthuman need not be antihuman, so it also need not be apocalyptic. Edwin Hutchins addresses the idea of distributed cognition through his nuanced study of the navigational systems of oceangoing ships¹¹. His research shows that the cognitive system responsible for locating the ship in space and navigating it successfully resides not in humans alone but in the complex interactions within an environment that includes both human and nonhuman actors. His study allows him to give an excellent response to John Searle's famous „Chinese room.”¹² By imagining a situation in which communication in Chinese can take place without the actors knowing what their actions mean, Searle challenged the idea that machines can think. Suppose, Searle said, that he is stuck inside a room, he who knows not a word in Chinese. Texts written in Chinese are slid through a slot in the door. He has in the room with him baskets of Chinese characters and a rulebook correlating the symbols written on the texts with other symbols in the basket. Using the rulebook, he assembles strings of characters and pushes them out the door. Although his Chinese interlocutors take these strings to be clever responses to their inquiries, Searle has not the least idea of the meaning of the texts he has produced. Therefore, it would be a mistake to say that machines can think, he argues, for like him, they produce comprehensible results without comprehending anything themselves. In Hutchins's neat interpretation, Searle's argument is valuable precisely because it makes clear that it is not Searle but the entire room that knows Chinese. In this distributed cognitive system, the Chinese room knows more than do any of its components, including Searle. The situation of modern humans is akin to that of Searle in the Chinese room, for every day we participate in systems whose total cognitive capacity exceeds our individual knowledge, including such devices as cars with electronic ignition systems, microwaves with computer chips that precisely adjust power levels, fax machines that warble to other fax machines, and electronic watches that communicate with a timing radio wave to set themselves and correct their date. Modern humans are capable of more sophisticated cognition than cavemen not because moderns are smarter, Hutchins concludes, but because they have constructed smarter environments in which to work.

4. Distributing

Like cognition, decision-making is distributed between human and nonhuman agents, and the adaptations to changed circumstances are evolutionary and embodied rather than abstract and consciously designed. Seen in this perspective, the prospect of humans working in partnership with intelligent machines is not so much a usurpation of human right and responsibility as it is a further development in the construction of *distributed cognition* environments, a construction that has been ongoing for thousand of years. Also changed in this perspective is the relation of human subjectivity to its environment. No longer is human will seen as the source from which emanates the mastery necessary to dominate and control the environment. Rather, the distributed cognition of the emergent human subject correlates with – in Bateson's phrase, becomes a metaphor for – the distributed cognitive system as a whole, in which „thinking, cognizing, translating” is done by both human and nonhuman actors. To conceptualize the human in these terms is not to imperil human survival but is precisely to enhance it, for the more we understand the flexible, adaptive structures that coordinate our environments and the metaphors that we ourselves are, the better we can

¹¹ Edwin Hutchins, *Cognition in the Wild* (Cambridge: MIT Press, 1995), recounted in N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago & London: The University of Chicago Press, 1999), 288-289.

¹² John R. Searle, „Is the Brain's Mind a Computer Program?” *Scientific American* 262, no. 1 (1990): 26-31.

fashion images of ourselves that accurately reflect the complex interplays that ultimately make the entire world one system.

5. *Communicatio idiomatum revisited*

In Christian theology *communicatio idiomatum* is a term from the theology of the Incarnation, attempting to define the relationship between two natures in one person. The theory is that the properties of the Divine Word can be ascribed to the man Jesus, and that the properties of the man Jesus Christ can be predicated of the Divine Word - a "Communication of Idioms" or mutual interchange of attributes, or properties. His person is a result of the personal union between the two natures, God and man; in other words the human being has divine attributes and the divine being is the subject of human properties. It is this theory which makes it possible for Christians to say "Christ is God" or "God is man" — two otherwise mutually exclusive concepts have been united through the mutual exchange between the two natures. It seems, through a work of cultural extension and transformation in time, another type of *communicatio idiomatum* happens, between humans and nonhumans, provided that distributed cognition is recognized. Humans and nonhumans can exchange properties, in order to compose in common the raw material of the collective, of natureculture, of material-semiotic assemblage. Here, as in many occasions in Haraway's and Latour's works, religious ideas are appropriated in secular representations of technoscience. If almost all talks of natural crisis end with apocalyptic overtones, *communicatio idiomatum* focuses on the construction of the commons. Our inherited theological narrative and its terms have and can take on another meaning, can become a vehicle to carry meanings (and feelings) from one discipline to the other. Redistributing speech between humans and nonhumans, while learning to be sceptical of all spokespersons— those who represent humans as well as those who represent nonhumans, redistributing the capacity to act, not as an autonomous subject, but as a social actor, intervener, promises another and better story about animals, machines, and people.

The material-semiotic actors, humans and nonhumans, cyborgs are defined above all as obstacles, scandals, as what suspends mastery, as what interrupts closure and the composition of collective. Human and nonhuman actors appear first of all as troublemakers: biological categories are troubled first, but social, political, economical ones follow closely. The notion of recalcitrance offers the most appropriate approach to defining material-semiotic actors' action. „Anyone who believes that nonhumans are defined by strict obedience to the laws of causality must never have followed the slow development of a laboratory experiment. Anyone who believes, conversely, that humans are defined at the outset by freedom must never have appreciated the ease with which they keep silent and obey, must have failed to weigh their connivance with the object role to which people seek so often to reduce them.“¹³

Cyborgs are the form the contemporary humans and nonhumans assume. These assemblages may be temporary but they certainly are contemporary and actual. Finitude and transiency and ambiguity belong to the ultimate nature of things. Autistic failure (for whatever reasons) to develop a workable theory of „other minds“, other reality imaginings, self-constructions and agency-attributions may precipitate „the end of the world as we know it“. It surely indicates a loss of contact with reality and a denial of our complicity in technonature and technoculture. To live with the consequences of technoscience is a skill we cannot afford not to learn, and we don't know how to do it well- even technonatives may still dream of an Eden and be inclined to slouth in exchanging properties.

¹³ Latour, 81.