

Etiche della terra. La bioetica ambientale tra ambientalismo ed ecologismo

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Bioetica: quale definizione ?

- Deontologia - insieme di doveri professionali, definiti prevalentemente in termini di autoregolamentazione interna.
- Etica medica - insieme di principi etici applicati o comunque correlati all'esercizio della medicina, che si estende anche alla teorizzazione dei diritti dei pazienti. Si pongono anche problemi di fondazione dell'etica.
- Bioetica – emergenza di situazioni di fronte alle quali i due precedenti sistemi risultano insufficienti, o perché il problema esorbita dal rapporto medico-paziente coinvolgendo scelte sociali o perché il tema stesso non è di stretta pertinenza medica.

Bioetica: origini, oggetto, metodi

- **Origini:**
- umanizzazione della medicina (processo di Norimberga 1947);
- problema della tecnologia in medicina (genetica, trapianti, sperimentazione umana).

Oggetto

- “Una scienza della sopravvivenza deve essere più di una sola scienza, e perciò propongo il termine Bioetica per sottolineare i due ingredienti più importanti per il conseguimento di una nuova sapienza di cui c’è un bisogno disperato: la conoscenza biologica e i valori umani” (Van R. Potter, *Bioethics. Bridge to the Future*, Prentice Hall, Englewood Cliffs NJ, 1971).
- “La bioetica è lo studio sistematico della condotta umana nei confronti della vita, esaminata alla luce dei valori e dei principi etici” (Warren T. Reich, *Encyclopaedia of Bioethics*, 1978).

Metodi

- **Deduttivo**
- Principi – benevolenza, non-maleficenza, autonomia, giustizia sociale (Beauchamp, Childress)

- **Induttivo**
- Esperienza e osservazione, principi etici operativi, bilanciamento tra principi e concretezza

- **Misto**
- Combinazione di metodo deduttivo e induttivo (coherentism)
- One important test of acceptance of bioethics as a discipline will be the extent to which it is called upon by scientists and physicians. This means that it should be developed inductively, working at least initially from the kinds of problems scientists and physicians believe they face and need assistance on.
D. Callahan

- **Procedurali**
- complessità
- soggetti portatori di punti di vista
- realizzazione di un percorso

Prospettive etiche

- Laiche/religiose
- Cognitiviste/non-cognitiviste
- Principio di autorità/principio di autonomia
- Individualiste/comunitarie
- Sacralità/qualità della vita
- Deontologismi/utilitarismi
- Teorie dei valori (e doveri)/teorie dei diritti
- Antropocentriche/biocentriche/ecocentriche
- Speciste/non-speciste
- Estensioniste/pluraliste

Biodiritto

Biodiritto come codificazione della bioetica ?

Il coinvolgimento giuridico rende necessario:

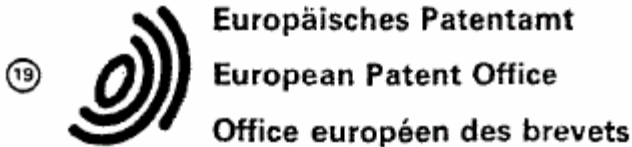
- 1. Pluralismo e multiculturalismo:
il passaggio dal piano della/e etica/etiche individuali a quello di una minima assiologia comune.
- 2. Problema dell'epistemologia:
la giustificazione e condivisione del sapere assunto
Una filosofia per la scienza, una scienza per il diritto:
 - a) **accreditamento di validità della scienza assunta dal diritto**
 - b) **trasparenza democratica**



Esiste la bioetica ambientale?



Oncomouse: dalla trappola al topo



⑪ Publication number:

0 169 672
A1

⑫

EUROPEAN PATENT APPLICATION

⑰ Application number: 85304490.7

⑱ Date of filing: 24.06.85

⑮ Method for producing transgenic animals.

⑯ A method for producing a transgenic eucaryotic animal having an increased probability of developing neoplasms, said method comprising introducing into an animal embryo an activated oncogene sequence. The animal may be used in testing a material suspected of being carcinogenic or of conferring protection against carcinogens.

⑳ Priority: 22.06.84 US 623774

㉑ Date of publication of application:
29.01.86 Bulletin 86/5

㉒ Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

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European Patent Office

- **Decision of the Examining Division**
July 14, 1989
Applicant: President and Fellows of Harvard College
OJ EPO, No. 11, 1989, pp. 451-461.
- **Decision of Technical Board of Appeal 3.3.2**
October 3, 1990
T 19/90 - 3.3.2
Chairman: P.A.M. Lançon
Members:
U. Kinkeldey
A. Nuss
E. Persson
R. Schulte
Applicant: President and Fellows of Harvard College
OJ EPO, No. 12, 1990, pp. 476-491.
- **Grant of European patent No. 0 169 672**
(Onco-mouse/Harvard)
April 3, 1992
OJ EPO, No. 10, 1992, pp. 588-593.

- Munich, 7 November 2001 – The EPO opposition division dealing with Harvard University's "oncomouse" patent has decided to maintain it in amended form. After a two-day hearing, the division ruled that the patent must be limited to transgenic rodents containing an additional cancer gene. This decision can be appealed by the patentee or any of the opponents.
- Munich, 5 November 2001 – The European Patent Office (EPO) has resumed opposition proceedings against Harvard University's "oncomouse" patent. The opposition division in Munich has invited the parties – Harvard University as the patent proprietor and 16 different groups, individuals, political parties and organisations wanting the patent revoked – to three days of oral proceedings, starting on 6 November.
- At issue is the first European patent for a transgenic animal, namely a mammal genetically engineered to develop cancer tumours under certain conditions and therefore suitable for cancer research. The patent has been in force since 13 May 1992.
- The "oncomouse" application was filed with the EPO in June 1985. Initially, on 14 July 1989, the examining division refused the application, inter alia on the grounds that Article 53 (b) of the European Patent Convention prohibits European patents on animals per se. The applicant appealed against that decision, and on 22 October 1990 an EPO technical board of appeal set it aside and sent the case back for re-examination.
- The board of appeal held that Article 53 (b) EPC rules out patents on animal varieties, not animals generally. The examiners therefore had to decide whether the application was for an "animal variety" within the meaning of the provision, and also whether to invoke Article 53 (a) EPC which prohibits patents for "inventions the publication or exploitation of which would be contrary to ordre public or morality".
- In a second decision in October 1991, the examining division granted the "oncomouse" patent as complying with the EPC, commenting that the patent application's purpose – to facilitate cancer research and prevention – was of such importance for humanity as to outweigh any disadvantages such as the suffering of the animals concerned.

Biotechnologie e rischi

- Council Directive 98/81EC (amending Directive 90/219/EEC) on the contained use of genetically modified micro-organisms
- Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release of genetically modified organisms

1. **Distinzione tra 'uso confinato' e 'rilascio deliberato'**
2. **PP come criterio generale, risk assessment come strumento di analisi**
3. **Classificazione dei rischi in base a gravità-e-ignoranza**

Council Directive 90/679/EEC on the protection of workers from risks related to exposure to biological agents at work, Art.2d: «'biological agents' shall be classified into four risk groups, according to their level of risk of infection: 1. Group 1 biological agent means one that is unlikely to cause human disease; 2. Group 2 biological agent means one that can cause human disease and might be a hazard to workers; it is unlikely to spread to the community; there is usually effective prophylaxis or treatment available; 3. Group 3 biological agent means one that can cause severe human disease and present a serious hazard to workers; it may present a risk of spreading to the community, but there is usually effective prophylaxis or treatment available; 4. Group 4 biological agent means one that causes severe human disease and is a serious hazard to workers; it present a high risk of spreading to the community; there is usually no effective prophylaxis or treatment available».

4. **Rischio ignoto = rischio più grave**

Council Directive 98/81EC (amending Directive 90/219/EEC) on the contained use of genetically modified micro-organisms, Art.5.4: «Where there is doubt between which of two risk classes are appropriate for the proposed contained activity(ies), the higher classification should be assigned until sufficient evidence justify the use of the lower classification».

Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release of genetically modified organisms

- (6) Under the Treaty, action by the Community relating to the environment should be based on the principle that preventive action should be taken.
- (8) The precautionary principle has been taken into account in the drafting of this Directive and must be taken into account when implementing it.
- (10) For a comprehensive and transparent legislative framework, it is necessary to ensure that the public is consulted by either the Commission or the Member States during the preparation of measures and that they are informed of the measures taken during the implementation of this Directive.
- 15) When defining "genetically modified organism" for the purpose of this Directive, human beings should not be considered as organisms.

Qual è il rapporto tra esseri umani e natura?

- Tre rapporti:
- dominio (scienza occidentale);
- conservazione (Oriente, monachesimo francescano);
- amministrazione (monachesimo benedettino).

Conservazione della natura



Conservazione

Non- interferenza, non-agire

- Tradizioni orientali (buddhismo, taoismo);
- monachesimo francescano (“non chiedere il non dato”).

Piccolo è bello

(E.Schumacher, Mondadori, Milano 1978
(1973))

- Ideale di non-interferenza;
- piccoli sistemi hanno un impatto minore;
- monachesimi (oggi comunità ecologiche, ecotopie).

Amministrazione

- Agire-in-base-a-regole dettate dalla natura, ideale del giardino.
- Monachesimo benedettino (ora et labora).

Amministrazione della natura



L'atteggiamento di dominio

Rivoluzione antropocentrica dei Sofisti e di Socrate → attenzione alla ragione umana, non sacralità della natura

Messaggio cristiano → radicamento umano nell'eterno.

Duplici radici dell'attitudine dominativa

- non sacralità della natura
- antropocentrismo
- eterogeneità della natura umana rispetto al mondo

Arroganza giudaico-cristiana: Genesi

Arroganza greco-cristiana: Socrate

- **S. MOSCOVICI, La società contro natura, Ubaldini, Roma 1973 (Paris 1972) .**
- **L. WHITE, The Historical Roots of Our Ecological Crisis, in "Science" 1967, 155, pp.1203-1207.**
- **J. PASSMORE, La nostra responsabilità per la natura, Feltrinelli, Milano 1986 (London 1974).**

J. MOLTSMANN, Dio nella Creazione. Una dottrina ecologica della Creazione, Queriniana, Brescia 1986.

J. BARR, Man and Nature. The Ecological Controversy and the Old Testament, in "Bulletin of the John Rylands University Library of Manchester" 1972, 55, pp.9-32: «Basically I would be against all attempts to explain a complicated modern process by setting it against two or three simple and remote models such as “biblical thought” or “Greek thought”. I would see the rise of science in the image of a “take-off”, where the most relevant forces and pressures are not the ones at the beginning of the process but those nearer the critical point» (p.27).

M. BROWN, Natural Law and Environment, in "Proceedings of the American Catholic Philosophical Association" 1990, LXIII, pp.221-234.

"Like Aristotle, Aquinas said that human happiness lies in contemplation and that contemplation is incompatible with deliberate or unthinking misuse of the rest of created nature".

"Natural law provides grounds for restraint in our treatment of other creatures and our world in general".

Dominio:
il mito del
controllo

Bioteecnologie
e modello
meccanicistico
della natura



Il management dell'ambiente

- Lo sviluppo che soddisfa i bisogni delle generazioni presenti, senza pregiudizio delle generazioni future (Rapporto Brundtland 1987)
- M. Sagoff, *The Economy of Earth*, Cambridge University Press, Cambridge 1988: "The things we are unwilling to pay for are not worthless to us. We simply think we ought not to pay for them. (...) These things have a dignity rather than a price. The things that have a dignity, I believe, are in general the things that help us to define our relations with one another. The environment we share has such a dignity"



Etica e ambiente

Wilderness Act

September 3, 1964

- DEFINITION OF WILDERNESS
- (c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The Aldo Leopold Foundation

Promoting harmony between people and land.



*"A thing is right when it tends to preserve
the integrity, stability, and beauty of the
biotic community."*

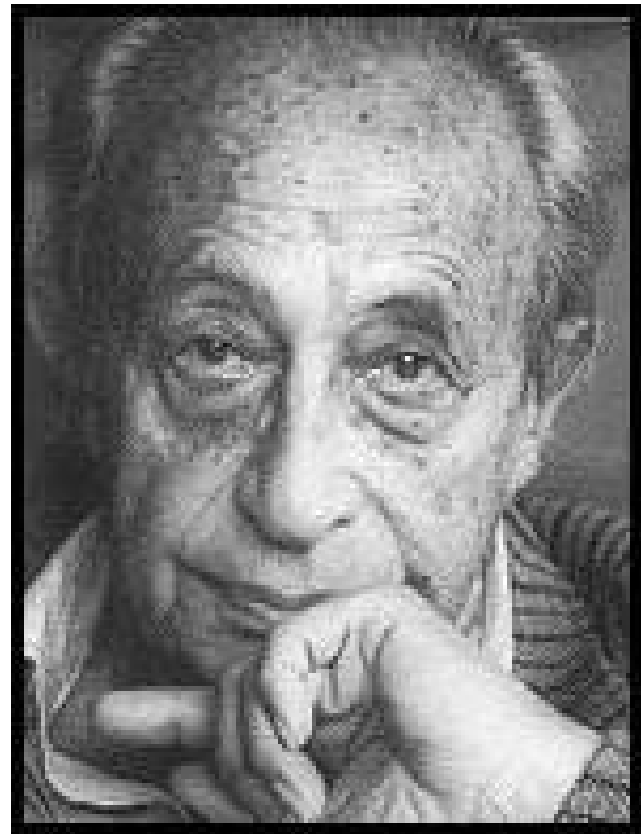
Aldo Leopold

- **Aldo Leopold-A Brief Chronology**

- **1887** Aldo Leopold, born in Burlington, Iowa on January 11, eldest of four children of Carl and Clara Leopold. Educated in Burlington public schools until 1903.
- **1906** Begins coursework at Yale Forest School (Master of Forestry, 1909).
- **1909** Joins U.S. Forest Service (established 1905). First field assignment as assistant on Apache National Forest in southeastern Arizona.
- **1918** After U.S. entry into World War I alters Forest Service priorities, leaves the service in January to accept a full-time position as secretary of the Albuquerque Chamber of Commerce.
- **1919** Rejoins Forest Service in August as assistant district forester in charge of operations, with responsibility for business organization, personnel finance, roads and trails, and fire control for the twenty million acres of national forests in the Southwest.
- **1933** In July, accepts appointment to a new chair of game management in the Department of Agriculture Economics at the University of Wisconsin.
- **1935** In January, assists in founding the Wilderness Society. In April, acquires the Wisconsin River farm ("the Shack") that would be the setting for the almanac sketches. In Autumn, studies forestry and wildlife management in Germany on a Carl Schurz fellowship.
- **1939** Becomes chairman of a new Department of Wildlife Management at the University of Wisconsin.
- **1943** Appointed by governor to a six-year term of the Wisconsin Conservation Commission, a tenure dominated by debates over deer policy.
- **1948** Stricken by heart attack and dies on April 21 while helping to fight a grass fire on a neighbor's farm at the shack. Burial in Burlington, Iowa.
- **1949** "Great Possessions" final editing overseen by Luna B. Leopold and published as *A Sand County Almanac*.

Hans Jonas e il principio responsabilità verso le generazioni future

- Hans Jonas:
necessità di prendere
in considerazione le
conseguenze
dell'azione
- Vulnerabilità critica
della natura e mutata
natura dell'agire
umano → fatti che
generano valori



- Agisci in modo che le conseguenze delle tue azioni siano compatibili con il mantenimento della vita compiutamente umana sulla terra → la sopravvivenza non è più un dato auto-garantito (come in Kant)
- Metodo: euristica della paura → attribuire più peso all'eventualità di sciagura che a quella di salvezza (principio di precauzione?)
- Tirannide benintenzionata e ben informata

Albert Schweitzer: etica della santità della vita

- "Biologicamente, la capacità di sentire è un carattere adattivo degli organismi viventi che li provvede di una migliore capacità di anticipare, e così evitare, rischi di vita. Ciò suggerisce (..) che le capacità di provare dolore e piacere sono ancillari rispetto a qualcosa di più importante piuttosto che rappresentare etichette di considerabilità" (K. Goodpaster)

Arne Naess: Shallow e Deep Ecology

SEM

Shallow Ecology Movement

Filosofie applicate
all'ambiente

|

antropocentrismo

individualismo

valore strumentale di N

gestione delle risorse

DEM

Deep Ecology Movement

Ecologia come fonte
di filosofia

|

ecocentrismo

olismo

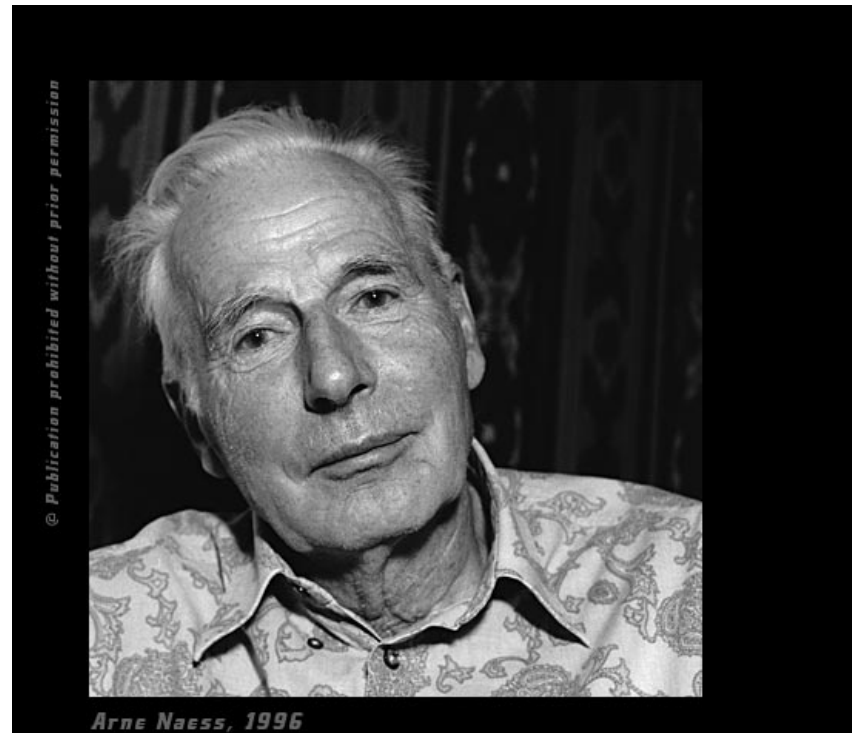
valore intrinseco di N

non-interferenza

Deep Ecology: Arne Naess

- I came easily because nature, especially small animals like crabs and shrimps made me feel much better than in my family life, so in order to avoid a difficult family life I went so to say, out to nature, I was in nature, I was together with plants and small animals, and found there that it was a universe of immense variety where I could be together with it, and feel that you were a fantastic being as a human being because I could see the beauty, I could see all the things, and then I thought that's just impossible that species on the earth, namely humans should really decrease the richness and diversity of life on earth.

•And the term richness is typical for the deep ecology order, that you will have abundance, not killing nearly every whale until they are threatened, but so that they are all over the Atlantic, so that a ship will have to change course, 'Oh there's a blue whale, Oh there's ... ', to have abundance all around you, all creatures and humans. That's also some basic things of deep ecology.



- Etica come ispirazione soggettiva rispetto a un sistema di valori:
- a) l'immagine a tutto campo, di relazionalità intrinseca tra uomo-natura - E' necessario passare da una visione che separa soggetto e oggetto, organismo e ambiente, a una prospettiva in cui uomo e natura sono legati da un rapporto di relazionalità intrinseca. Con relazionalità intrinseca si intende che la definizione dei due termini uomo e natura deve includere la relazione tra essi esistente;
- b) egualitarismo biosferico di principio, inteso come uguale diritto di vivere e di realizzare se stessi - Non esistono gerarchie tra le specie; ognuna dipende dalle altre;
- c) principio di diversità e simbiosi tra i viventi - Tutte le specie contribuiscono, con la propria presenza e attraverso le relazioni che le legano alle altre specie, a mantenere gli equilibri ecosistemici;
- d) principio di complessità della realtà - Le molteplici relazioni che legano gli organismi tra loro e l'ambiente sono tali da rendere difficilmente dissezionabile la realtà. La complessità naturale rappresenta il limite della conoscenza, poiché essa si traduce in imprevedibilità essenziale dei fenomeni.

Holmes Rolston: il fondamento ecologico oggettivo dei valori umani

L'ecologia è il luogo in cui naturalmente il confine tra descrizione e prescrizione cessa di esistere, perché le categorie che la spiegazione ecologica mette in campo sono dotate di un'implicita valenza assiologica. La descrizione ecologica si imbatte in unità, armonia, interdipendenza, creatività, sostegno vitale, conflitto e complementarità, stabilità, ricchezza, comunità - nozioni valutativamente cariche -, ma tali idee vengono rinvenute in natura, perché noi cerchiamo con una disposizione che tende a riconoscere valore a tali realtà. E la descrizione ecologica non si limita a confermare questi valori; piuttosto ne informa il contenuto.



Bryan G. Norton: il valore trasformativo della natura

- RFF è un'analisi inaccettabile non solo perché finge di poter stabilire il valore economico di ogni specie minacciata di estinzione, adottando così un economicismo estremo; ma anche per la sua inattendibilità scientifica, dal momento che ciò che conta biologicamente non è la singola, irrelata sopravvivenza di una specie, ma la conservazione della diversità biologica complessiva (le specie come insiemi interrelati). Se ciò che ha rilevanza è la biodiversità totale -per cui è opportuno dare valore, almeno prima facie a qualunque specie, allora i procedimenti BCA e RFF, nei quali si valuta il peso relativo di ciascuna specie nelle preferenze del pubblico, devono essere respinti per ragioni anche solo scientifiche.

- "Possono più ecosistemi bilanciare il valore di un bambino ? Non si tratta solo di non sapere che cosa rispondere a questa domanda; non si ha idea di come cominciare a rispondere"



- Valore d'uso
 - valore di opzione
 - valore di quasi opzione
 - valore di esistenza
-
- Preferenze qualificate e valore trasformativo (M. Krieger, What's wrong with plastic trees?, Science 1973)

La tutela dell'ambiente nel diritto:
Complessità, incertezza, prudenza,

Ethyl Corp. v. EPA, 541 F.2d 1 (DC Circ. 1976)

“Undoubtedly, certainty is the scientific ideal -to the extent that even science can be certain of its truth. But certainty in the complexities of environment [...] may be achievable only after the fact”.

Prudenza ecologica come limitazione dei diritti (economici) umani

- *Tennessee Valley Authority v. Hill*, 98 SC 22799 (1978)

“Il valore del patrimonio genetico è incalcolabile. È nell'interesse dell'umanità limitare le perdite dovute a variazioni genetiche. La ragione è semplice: si tratta delle chiavi di un enigma che siamo incapaci di risolvere, e possono fornire risposte a domande che noi non abbiamo ancora imparato a formulare. Il più semplice egocentrismo ci impone di essere prudenti”.

Riconoscere diritti alla natura

SIERRA CLUB v. MORTON, 405 U.S. 727 (1972)

Decided April 19, 1972

The Mineral King Valley is an area of great natural beauty nestled in the Sierra Nevada Mountains in Tulare County, California, adjacent to Sequoia National Park. It has been part of the Sequoia National Forest since 1926, and is designated as a national game refuge by special Act of Congress. The final Disney plan, approved by the Forest Service in January 1969, outlines a \$35 million complex of motels, restaurants, swimming pools, parking lots, and other structures designed to accommodate 14,000 visitors daily.

The critical question of "standing" would be simplified and also put neatly in focus if we fashioned a federal rule that allowed environmental issues to be litigated before federal agencies or federal courts in the name of the inanimate object (...)

Inanimate objects are sometimes parties in litigation. A ship has a legal personality, a fiction found useful for maritime purposes. So it should be as respects valleys, alpine meadows, rivers, lakes, estuaries, beaches, ridges, groves of trees, swampland, or even air that feels the destructive pressures of modern technology and modern life.

C.D. STONE, *Should Trees Have Standing ? Toward Legal Rights for Natural Objects*, Tioga Publishing Co., Palo Alto 1988 (Los Altos 1974)

- the thing can institute legal actions at its behest;
- in determining the granting of legal relief, the court must take the injury to nature into account;
- that relief must run to the benefit of nature.

Limitare i diritti presenti attraverso i diritti delle generazioni future

The Philippines Supreme Court Decision in Minors Oposa v. Secretary of the Department of Environment and Natural Resources, 30.7.1993

- Regional Trial Court: "the plaintiffs have no cause of action against (the Department of Environment and Natural Resources) and the issues raised by the plaintiffs is a political questions which properly pertains to the legislative or executive branches of Government".
- Supreme Court: "Petitioners minors assert that they represent their generation as well as generations yet unborn. We find no difficulty in ruling that they can, for themselves, for others of their generation and for the succeeding generations, file a class suit. Their personality to sue in behalf of the succeeding generations can only be based on the concept of intergenerational responsibility insofar as the right to a balanced and healthful ecology is concerned. (..) Put a little differently, the minors' assertion of their right to a sound environment constitutes, at the same time, the performance of their obligation to ensure the protection of that right for the generations to come".

Esperti ed expertise

- Chi sono gli esperti?
- Definizione delle discipline (?) o dei problemi rilevanti;
- indipendenti o interessati (possibilità di accesso alle informazioni)
- esperti laici;
- quali sono i metodi validi rispetto a campi della conoscenza nuovi?

Love Canal, Niagara Falls 1978

Introduction

During the summer of 1978, the Love Canal first came to international attention.

On August 7, 1978, United States President Jimmy Carter declared a federal emergency at the Love Canal, a former chemical landfill which became a 15-acre neighborhood of the City of Niagara Falls, New York. The Love Canal became the first man-made disaster to receive such a designation based on a variety of environmental and health related studies.

As a result of grass roots interest and media attention, the Love Canal provided an impetus for dramatic interest in and changes to environmental concerns worldwide.

Love Canal 1978





DANGER
HAZARDOUS
WASTE AREA

UNAUTHORIZED
PERSONNEL
KEEP OUT

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
1-800-342-9296

March 21, 1979

Testimony Presented to the House Sub-committee on Oversight & Investigations

Lois M. Gibbs

President, Love Canal Homeowners Association

My name is Lois Gibbs and I am president of the Love Canal Homeowners Association (L.C.H.A.). The L.C.H.A. is a citizens group consisting of over 1,000 families representing more than 90% of the residents in the area. L.C.H.A. was formed to deal with the problem of living near the Love Canal chemical dumpsite. I became involved in this situation after discovering that toxic chemicals were buried two blocks from my home and that these chemicals could be aggravating my children's health problems, one of whom attended the 99th Street School located in the center of the dump. I started by canvassing the neighborhood to find if other residents had similar problems. I discovered that the majority of residents had what seemed to me an unusually high amount of illnesses. I then worked with residents to form an organization to identify their