## Axioms for an Empirical Ethical Framework

Ethical building blocks/ base-code / empirically justifiable propositions:

*Commonality and Value*

1. All life-forms share in the common cause of the struggle to avoid death
2. All life has *in principle* utility as a force for doing work and recycling energy and death for the benefit of itself and potentially other life - and in doing so also creates new valuable information (and environmental entropy)
3. Life itself, as manifested in a diversity life-forms, is an invariant good.
4. It follows that:
   1. any action that undermines the chance of survival and success of life, manifested in a diversity of life-forms, that is not based on necessity (being survival of one’s own Species) is unskillful and invariantly unethical.
5. Life is a complex interacting system between differentiated Species and different life-forms that coordinate and compete to make use of available energy and resources - in a local system it gives rise to inter-dependence arising from interacting parallel evolution of different life-forms
6. All life-forms *are expected* to have some degree of pleasure or attraction towards survival and genesis of new life and pain or avoidance behavior towards harmful or deadly behaviour so as to survive and better perpetuate their Code and in doing so their Species
7. Lif-forms *are expected* to have the capacity for suffering in proportion to their capacity for attraction to other beings, aversion to pain and loss, capacity for fear, desire for freedom to carry out self-chosen activities (including their view of what is useful) and their ability to reflect on their condition.
8. Each Species and life-form has some degree of objective measurable information value as a carrier of Code including difficult to quantify negative capability.
9. Sapient Beings and Species may have additional value as carriers and creators of Culture.
10. It follows that:
    1. Avoidance of unnecessary suffering of Sentient beings should be a primary objective of any decision making process or action
    2. Each living being has *in principle*, and all the more so as a member of a Species, some degree of objective value
    3. Each living being and Species will also have greater inter-dependent subjective value to some other beings and Species
    4. The objective and intersubjective value of each living entity increases exponentially as its Species gets closer to apparently irreversible extinction
    5. The quality of life lived is *in principle* more important than aliveness but not in absolutely every case
    6. The quantity of species and life-forms are very important metrics

*Uncertainty*

1. The future success of any life-form is subject to a degree of irreducible uncertainty.
2. All life-forms are fallible and have limited and widely differing access to information when making decisions.
3. It follows that the principle of Negative Capability is useful in any assessments or forecasts of Optimal Utility.

*Selfish genes and replicators*

1. As a strong survival mechanism, selfishness *is expected* to be a necessary or at least predominant useful objective feature of life and so must be an essential part of any ethical framework.
2. Self-centredness is *a likely* *but not necessary* consequence of selfishness - particularly in the absence of Wisdom - and manifests a high degree of subjectivity. It is *not expected to be useful* as a factor when assessing Utility Optimal outcomes but *it is an expected condition* that is useful to understand the behaviour of Beings when making sub-optimal decisions for the other affected life-forms.
3. It follows that:
   1. Some life-forms will seek to avoid death by killing other life-forms for energy or by taking their resources
   2. Some life-forms will kill other life-forms for pleasure or will derive pleasure in it due to the survival drive
   3. Some life-forms will kill other life-forms by recklessness, inattention, ignorance and also unknowingly
   4. All life-forms *are expected* to prefer their own lives and well being and that of their support group, family, tribe, Culture members or Species.
   5. As all life-forms are *expected to be* self-centred and selfish in any competition for resources or conflict they *are expected* to demand or act on the basis of a privileged position:
      1. as between each other
      2. versus all other life-forms
   6. Sapient beings *are likely* to seek to monopolise resources including at the expense of most or all other Sapients and all other life-forms. This gives rise to:
      1. sub-optimal allocation of resources for Sapients and all other life-forms
      2. increased risk of warfare, aggression, cheating and lying
      3. centralised political control mechanisms intended to accelerate or perpetuate sub-optimal allocation of resources
      4. control of public channels of communication and information by a very limited number of Sapients
      5. misuse and abuse of (usually costly) legal systems
   7. Sapient beings are likely to undervalue non-Sapient entities
   8. Sapient beings *are expected* to define Sapience and Sentience in a subjective sense that is intended to benefit them versus other life-forms
   9. Sapience must be defined in a way that does not require direct (same language) communication of Sapience or using Species-centric contingent values or qualities
   10. The absence of proof of Aliveness, Sapience or Sentience or Wisdom is not proof of absence of Aliveness, Sapience, Sentience or Wisdom
   11. ‘Facts’ put forward against protecting other life-forms from suffering *should be expected* to be put forward for self-interested purposes disguised as objective statements or propositions
   12. Great humility and care is required in these matters in the face of uncertainty due to overwhelming evidence of numerous historic errors of ethical judgment and behaviour in Sapients civilisations when valuing other life-forms (including other Sapients)
   13. The burden of proof is on the Sapient being or Species asserting:
       1. that the other life-form has low relative value and utility ability
       2. the other life-form is not Sentient
       3. the other life-form is not Sapient
   14. In the *expected conditions* of self-centredness and uncertainty, the threshold for proof of Aliveness, low value, non-Sentience and non-Sapience must be set lower than 50%

*Differentiation as Inequality*

1. Evolution is the most successful strategy currently known for life-forms to do useful work using free energy. Other strategies may also prove to be useful over long periods of time.
2. Evolution relies upon small inequalities or differences from a common code base for life-forms. Small degrees of freedom of differentiation can give rise to significant variety and differences over longer time-frames.
3. Inequality is therefore *in principle* a form of differentiation allowing more degrees of freedom for useful work *to potentially* be done.
4. The commonality of Code (and if applicable Culture) of any life-forms within a species and genus is orders of magnitude greater than the differences in Code (and if applicable culture.) Commonalities in Code (and if applicable Culture) are necessary or helpful for survival.
5. The principle of Negative Capability gives rise to difficulties and a degree of irreducible uncertainty in assessing the extent to which differences in Code (and if applicable Culture) may be more Utility Optimal.
6. Sapient beings *are likely* to be more intelligent than non-sapient beings but not in every case
7. Sapient beings are *in principle:*
   1. able to use their intelligence more usefully than non-sapient beings
   2. capable of a greater capacity for doing useful work than non-sapient beings
8. It follows that:
   1. Inequality in access to or control of resources is not *in principle* contrary to Utility Optimal outcomes
   2. Inequalities *in expected payoffs* or *practice that* lead to reduced aggregate payoffs for affected life-forms of the same Species or between different similar Species *are likely not to be* Utility Optimal.
   3. Tending towards equality or a reduced degree of differentiation is *in principle* useful to the extent to which it increases the degrees of freedom to do work within a Utility Optimal framework.
   4. All life-forms of the same Species are *in principle* of equal value (in the absence of information about differing usefulness) but in practice may not be of equal value when assessing or forecasting Utility Optimal outcomes
   5. All species are not *in principle* of equal value or worth as between each other when valuing decisions about what is Utility Optimal

*Understanding & communication*

1. All Sapient beings *are expected in principle* to be able to understand cross-species ethical issues, non-Sapient beings *are not necessarily expected* to be able to
2. Not all Sapient beings *will necessarily* be able to understand this framework or other complex EEFs
3. Not all Sapient beings will be able to represent or communicate their position in any decision making process under an EEF
4. Not all Sapient beings will agree with any EEF - it is not intended to be a contract though some consensus will be needed to create, evolve and give effect to it (see Consensus)
5. There are significant risks of misunderstanding or misvaluing other beings in any EEF - this will lead to unavoidable injustices. The risk must be set against the greater risk of failing to attribute any significant value or relevant qualities to other life-forms when making decisions

*Assessment, Valuation & Consensus*

1. Utility Optimal outcomes benefiting affected Sapient beings and other life-forms in aggregate can only be achieved by decisions taken:
   1. based on the expected total value (or payoff) in benefits and harms for all affected life-forms including non-Sapient entities and entities that may be Sapient but are non-communicative
   2. based on a scoring system with appropriate, rational, detailed, evidenced and defensible indexing and weighting
2. The Indexing and evaluation of decisions used in an EEF must be:
   1. First specified and agreed by;
      1. a community of suitable stakeholders[[1]](#footnote-0)
      2. economic and scientific analysis of the proposed utility of any action or course of action
   2. Reviewed and finalised working with other scientists and key stakeholders
   3. Put forward for wider discussion with the Sapient communicative community for Consensus
   4. If agreed, subject to sufficient Consensus[[2]](#footnote-1) then it should be:
      1. reviewed regularly and subject to renewed Consensus for any potential changes periodically (no less than once every X period);
      2. specified in sufficient detail with all facts, assumptions and material unknowns and uncertainties recorded by each community using an EEF
      3. changes to be approved by no less than the required x% as per the initial majority requirements

*Mitigation and management of errors*

1. It follows from all of the axioms above that:
   1. Widely distributed and secure decentralised information channels and Consensus mechanisms are required to make greater Utility Optimal decisions given the *highly likely* risk arising from central points of failure and *the expected* capture of the economic, political and legal systems by a small group or class of self-interested Sapients that have no interest in obtaining Utility Optimal outcomes and have strong interests in securing sub-optimal outcomes that benefit them most
   2. Sapients are *expected to* disagree most about the qualities and value accorded to other life-forms and Species under any ethical framework. Suitably robust Consensus mechanisms, that prevent one smaller group of Sapients from making all such decisions, are required to minimise the risk of error and to rectify errors as they become known
   3. Sapients reviewing the previous decisions made and particularly the quantification of qualities and utility made under an EEF are *likely to be rightly* skeptical as to the justice of some decisions made. This is *likely to be* unavoidable though it should be borne in mind when decisions are made. All decisions should be informed by the knowledge of and reasons for historic failures and errors and with an expectation of a significant degree of continuing fallibility.

1. Expected to be scientists led by experts in behaviour of living beings, interdependency of life, life-carrying capacity of systems and the expected near-future free energy capacity available [↑](#footnote-ref-0)
2. Have in mind levels of: 90% for the Axioms, 95% for the Laws, 90% for the Principles and 75% for the weightings and a bit lower thresholds for proposing changes. [↑](#footnote-ref-1)