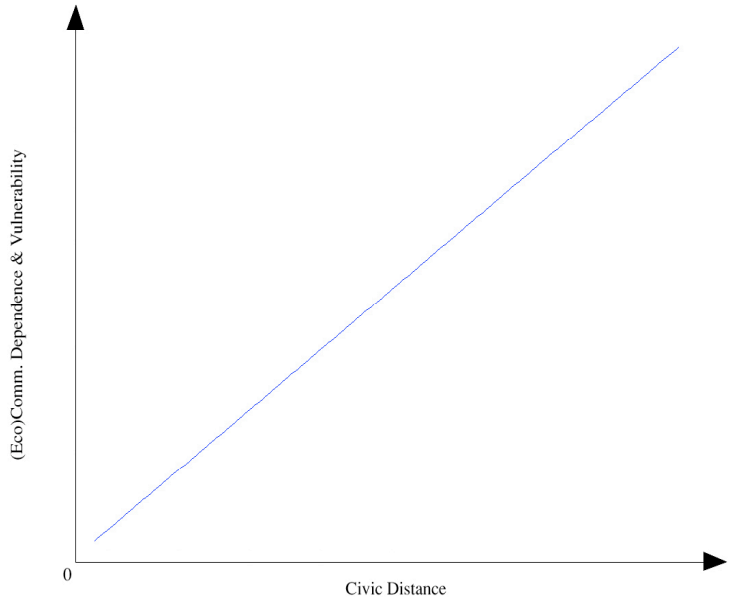
I. Technology's Relationships to Ecological Communication: Dependence; Vulnerability; Immunity

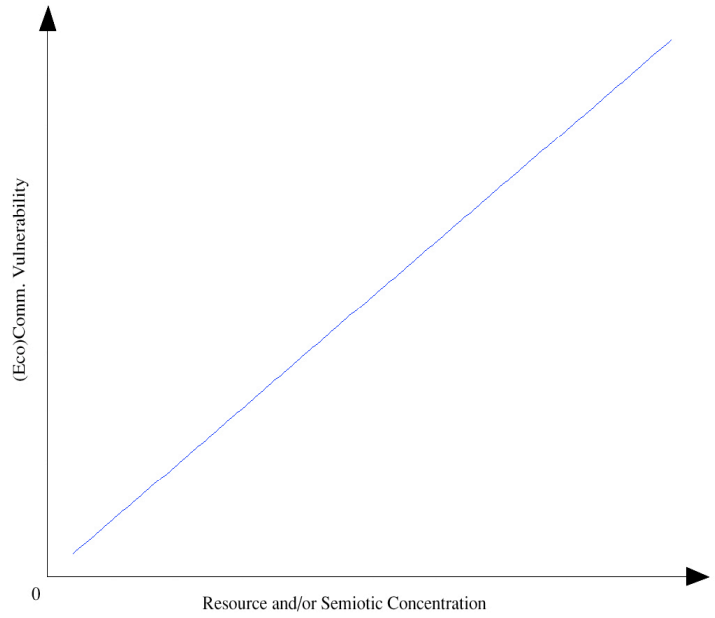
Figure 1. The Principle of Proximation



$e_d \propto D$
$e_v \propto D$

The (Eco)Communicative Dependence (e_d) and Vulnerability (e_v) of a technology are directly proportional to the technology's civic Distance (D).

Figure 2. The Principle of Concentration

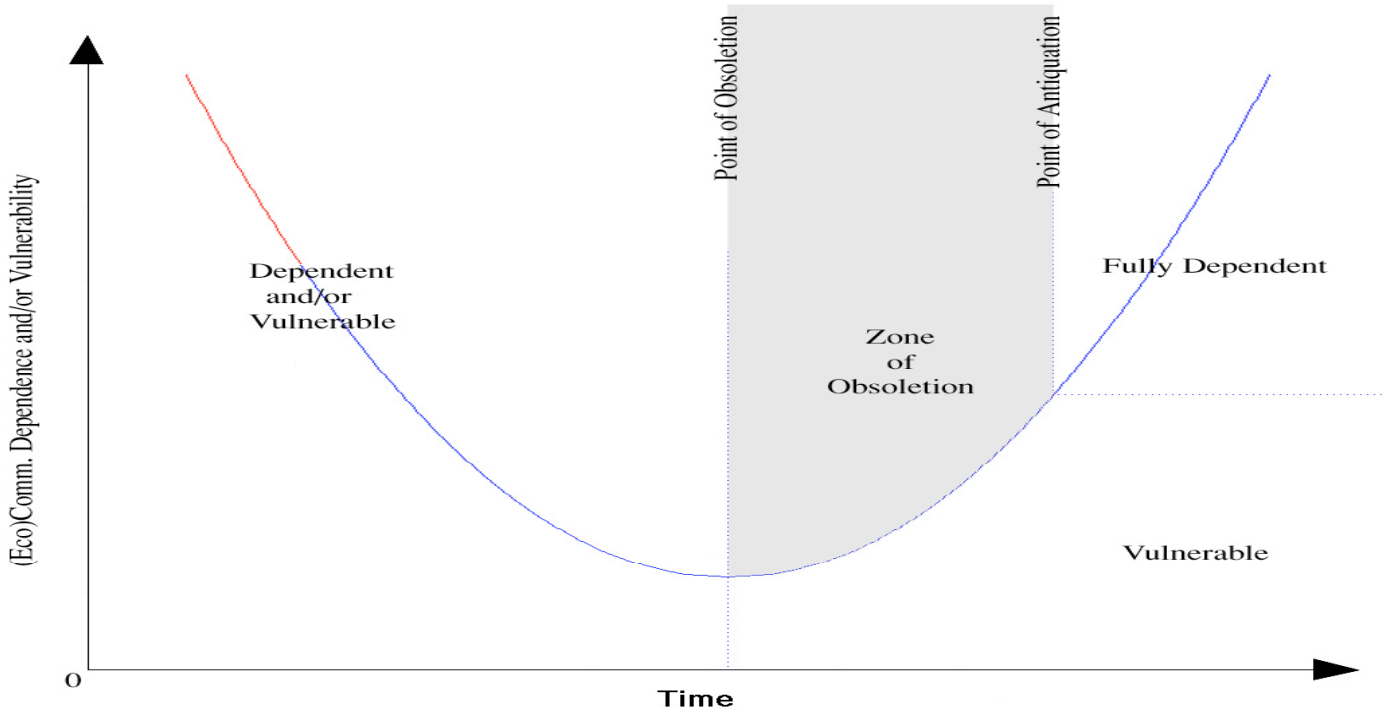


$e_v \propto C$

The (Eco)Communicative Vulnerability (e_v) of a technology is directly proportional to the technology's resource and/or semiotic Concentration (C).

II. Technology's Relationships to Ecological Communication: Dependence and Vulnerability

Figure 3. The Principle of Temporality



$$e_d \propto (t - t_{obs})^2 \text{ for } t \in (0, t_{obs}) \cup (t_{hist}, \infty)$$
$$e_v \propto (t - t_{obs})^2 \text{ for } t \in (0, t_{hist})$$

Explanation

1. Both (Eco)Communicative Dependence (e_d) and Vulnerability (e_v) of a technology decrease with Time (t): but the trend reverses as the technology reaches its Obsoletion (t_{obs}).

2. (Eco)Communicative Vulnerability (e_v) of a technology increases once the technology slips into Obsoletion (t_{obs}) (indicated as the shaded area—the Zone of Obsoletion—in the graph); but, past Obsoletion, the factor of communicative Dependence takes over entirely. This is because the technology, because of its antiquation (t_{hist}) must now fully depend on any communication in order to "exist" at all in the minds of the people. Notably, past its antiquation, a technology is not vulnerable to ecological communication.

Notes of Clarification

$e_d \propto (t - t_{obs})^2$ means that a technology's dependence on (ecological) communication is to the square of the entity $(t - t_{obs})$.
$e_v \propto (t - t_{obs})^2$ means that a technology's vulnerability to (ecological) communication is to the square of the entity $(t - t_{obs})$.

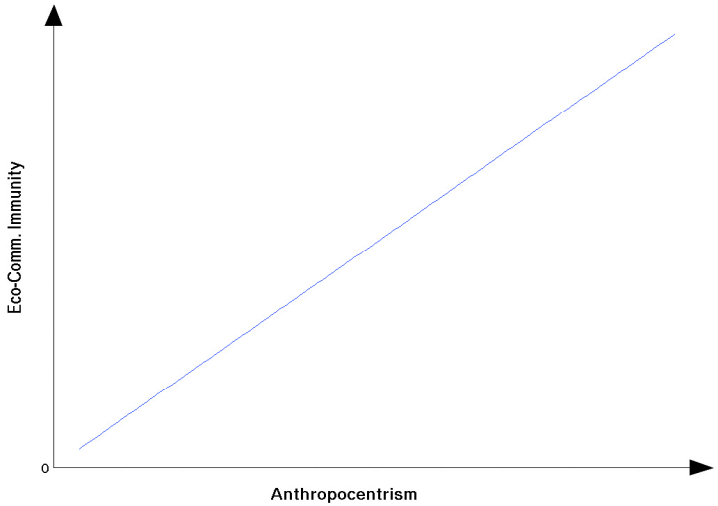
The range values for the above are as follows:

$t \in (0, t_{obs}) \cup (t_{hist}, \infty)$: The variable time "t" can take values which lie between: zero and t_{obs} *or* t_{hist} and infinity. The variable time "t" will lie within the union of the two open intervals $(0, t_{obs})$ *or* (t_{hist}, ∞), where, t_{obs} refers to the time after which a technology is deemed obsolete, and t_{hist} refers to the time by which that technology becomes purely a matter of historical interest (i.e., an antique). (Notably: $0 < t < t_{obs}$ *or* $t_{hist} < +\infty$).

$t \in (0, t_{hist})$: means that "t" will lie in the open interval $(0, t_{hist})$, where t_{hist} refers to the time by which a technology becomes purely a matter of historical interest (i.e., an antique).

III. Technology's Relationships to Ecological Communication

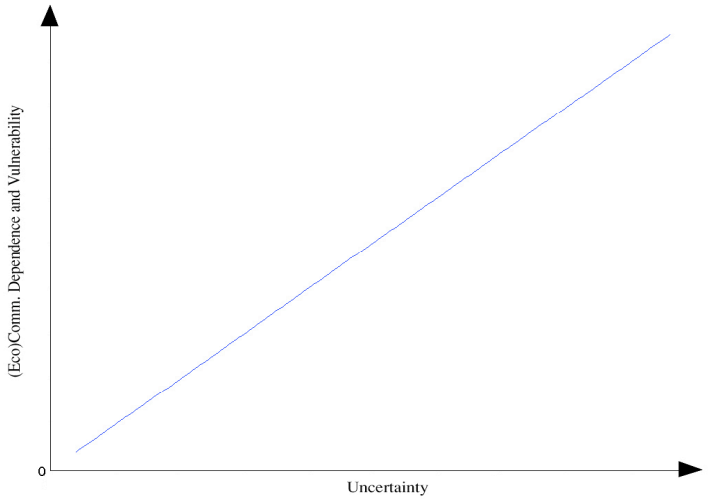
Figure 4. The Principle of Anthropocentrism



$e_i \propto A$

The Eco-Communicative Immunity (e_i) of a technology is directly proportional to the technology's manifest Anthropocentrism (A).

Figure 5. The Principle of Uncertainty



$e_d \propto U$
$e_v \propto U$

The Eco-Communicative Dependence (e_d) and Vulnerability (e_v) of a technology are directly proportional to the technology's ontological Uncertainty (U).