Environment

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environment is now the usual name for the main editorial category dealing with news and opinion concerned with humans' impact on the world around them. The word is also prominent in the names, ambitions, proposed policies and standards of bodies engaged with such issues, as various as ministries, NGOs with quite different priorities, and oppositional protest and campaigning groups. Despite the word's prominence, however, use of *environment* (and derivatives including *environmental* and *environmentalism*) is imprecise, and the word is positioned awkwardly among related terms including *surroundings*, *ecology* and *natural world*. In some contexts, *environment* is used simply to mean "surroundings": the physical relationship between objects or the backdrop to various aspects of human activity. In other uses, *environment* plays a role in investigation of profound issues facing the earth at all levels from local to global, and ranging across topics from fossil fuels, food production and forestry, through rising sea levels, air pollution, windfarms and rewilding, to loss of biodiversity and assessment of the threat of an overall *environmental catastrophe*. Uncertainty between different conceptualisations of what an "environment" is, in this context, and what relationship holds between humans and their immediate environment, complicates thinking in an area of especially urgent but intractable analysis and planning. Some of those complications can nevertheless be clarified by examining the word's historical development and current use.

1.   Summary of *OED* entry

The English word *environment* has multiple origins, and its etymology highlights the difficulty of drawing clear lines between what are considered to be 'languages' in earlier periods. *environment* has a single-word etymon in Middle French, *environnement*, which is itself derived from *environner* 'to surround'. This is clearly the origin of the earliest attestation in *OED,* in a 1603 edition of Plutarch's *Morals* which simply translates the French form in the same meaning, 'The action of circumnavigating, encompassing, or surrounding something; the state of being encompassed or surrounded'. However, the surviving evidence shows that it is not until over a century later – in the 18th century – that the word *environment* becomes more fully established and begins to be used with its more usual English meanings. This extended period of time suggests that the word was re-coined, as if it were new to the language, by a process of word formation within English: *environment* appears in this way to be a derivation from the already-established verb *environ* 'surround', borrowed earlier from French, and the native suffix –*ment*, which commonly forms a noun when affixed to a verb. The process by which a form appears to be 'born' more than once in different periods within a language like this is known by linguists as polygenesis, and current forms such as *air kiss* and the verb form *friend* provide comparable examples, with the historical record for each showing a lack of continuity from earlier examples to later uses.

In quotations from the 1720s onwards, *environment* was being used in two senses. Each reflects what has been described above as the word's etymological, or earliest, meaning. That sense appears to be relatively rare and is obsolete after 19c; two out of four *OED* quotations under this sense come from translations (including the 1603 Plutarch translation cited above), and one is from an eighteenth-century dictionary. The dictionary example indicates considerable currency, since it is attestations showing more usual usage that are generally included by OED editors if available.

OED sense 2a, however, 'The area surrounding **a place or thing**…' is much more common, and is still a core meaning of the word. As the *OED* entry notes, this sense is used figuratively as well as literally, and the two 19c century quotations from Thomas Carlyle illustrate each kind of use. The "kind picturesque environment" of Bayreuth is evidently a physical space; but when Carlyle talks of the literature of English writers being "without any local environment… not nourished by the affections which spring from a native soil", this is at least partially figurative. "Literature", in the sense he intends, is not a

purely physical entity which exists in a physical location, though his idea of a sense of context does relate the meaning to geographical location.

All subsequently attested senses of *environment*, which have their own first attestations in 19c and 20c, develop from sense 2a. All of these remain in current use, though they vary in frequency and are more or less specialized. Sense 2b shows a slightly narrowed use, referring to the 'physical surroundings' of 'external conditions' affecting a living thing, either human, animal or plant. Attestations show that this sense is particularly common in, though not restricted to, scientific writing. By the late 19c it can be further narrowed by use of a modifier to specify an environment with particular characteristics (sense 2c), such as a "semi-desert environment" (attested in 1887) or the "static, acid environment of the spleen" (1968).

Three further related senses show the word becoming part of the technical register of particular scientific fields. For linguists, for example, *environment* is a term in phonetics to denote 'the context in which a speech sound occurs' (sense 3). More recently, *environment* has also gained currency as a computing term used to describe the system or structure in which a computer or program, or a user or programmer, operates (sense 5), and as a term in the field of art for 'A large three-dimensional artwork designed to be experienced from within' (sense 6). The emerging notion of an interactive relationship between an entity and its surroundings or context can also be seen in the emergence of a less contextually restricted and more abstract sense which develops in the mid-20c, referring to **'**The social, political, or cultural circumstances in which a person lives, esp. with respect to their effect on behaviour, attitudes, etc.'.

Perhaps the most significant current sense, however, and the one which is certainly the most frequent, but arguably also the most difficult, is 2d: **'the natural world'**. In this sense, *environment* is generally **preceded by the definite article *the***, and sometimes the use is given a capital letter The earliest attestation, in a 1948 issue of *Science Monthly*, is a very typical reference to "man's impact on the environment", illustrating the note in the definition that this meaning refers to the natural world "especially as affected by human activity". This sense shows definite continuity with earlier and contemporary uses, though in context it is rarely used in a neutral way, as the remaining OED quotations show. The impact of man on *the environment* is generally acknowledged to be negative, and the term therefore has major political currency, including in debate about what responses to changes in the environment are desirable or necessary. All attributive uses in

the compounds listed in section C2 of the entry, and most of those in section C3, show use of *environment* in this meaning, indicating how established it has become.

3: OED entry

environment, *n.*

Origin: Of multiple origins. Partly a borrowing from French. Partly formed within English, by derivation. **Etymons:** French *environnement* ; ENVIRON *v.*, -MENT *suffix*.

Etymology: Originally < Middle French *environnement* (French *environnement* : see below) action of surrounding something (1487; earlier in senses 'proximity' (first half of the 12th cent. in Anglo-Norman as *avirounement*) and 'surroundings, periphery' (*c*1200 in Anglo-Norman as *envirunement*))
< *environner* , *envirunner* ENVIRON *v.* + -ment -MENT *suffix*. In later use
< ENVIRON *v.* + -MENT *suffix*. Compare earlier ENVIRON *n.*, ENVIRONING *n.*, ENVIRONRY *n.*

French *environnement* is rare after the early 18th cent., and is now found chiefly (as a reborrowing < English) in the specific senses 2b (1921) and 3 (second half of the 20th cent. or earlier).

†**1.** The action of circumnavigating, encompassing, or surrounding something; the state of being encompassed or surrounded. Cf. ENVIRON*v.* 3, 2. *Obs.* 1603 - 1888

1603   P. HOLLAND tr. Plutarch *Morals* 1009,   I wot not what circumplexions and environments [Fr. *enuironnements*; Gk. *περιελεύσεις*].

1843   T. SHEN tr. *Rambles of Ching Tĭh* II. xxxviii. 205   On witnessing the number of the rebels, and their strict environment of the city.

2.

a. The area surrounding a place or thing; the environs, surroundings, or physical context. Also *fig.* 1725 - 1989

1725   J. SEDGWICK *New Treat. Liquors* xviii. 345   If we examine into Anatomy, we shall find a perfect Environment of Glands and Emunctories all around the Neck, both internally and externally, which attract and drain off the imperfect and excretory juices.

1828   T. CARLYLE in _Edinb. Rev._ **48** 288   Literature was, as it were, without any local environment; was not nourished by the affections which spring from a native soil.

1872   J. S. BLACKIE _Lays of Highlands_ Introd. 37   The environment of this loch put me in mind of Grasmere.

   b. The physical surroundings or conditions in which a person or other organism lives, develops, etc., or in which a thing exists; the external conditions in general affecting the life, existence, or properties of an organism or object. 1855 - 2008

1874   H. SIDGWICK _Methods of Ethics_ v. 167   The organism is continually adapted to its environment.

1990   C. PAGLIA _Sexual Personae_ xxiv. 660   In biology, neoteny is the protraction of juvenile traits into adulthood or the premature development of adult sexual traits in a hostile environment.

2008   _Daily Tel._ 6 May 9/1 (_advt._)   These smart planthouses create the perfect environment to harden-off young plants and nurture seedlings and cuttings.

   c. With modifying word: a particular set of surroundings or conditions which something or someone exists in or interacts with.

1887   _Science_ 17 June 228/1   The ancient builders were stimulated to the best use of the exceptional materials about them..by the difficult conditions of their semi-desert environment.

1968   _New Eng. Jrnl. Med._ 11 Jan. 80/1   It is possible that the static, acid environment of the spleen provides a further degree of metabolic punishment to the already straitened deficient cell by creating a further reduction in glycolysis.

   d. Freq. with _the._ The natural world or physical surroundings in general, either as a whole or within a particular geographical area, esp. as affected by human activity. 1948 - 2007

1948   _Sci. Monthly_ Feb. 133/2   With this outside help, man's impact on the environment..becomes much greater than that of other mammalian species.

2007   _Guardian_ 25 Jan. (G2 section) 18/2   The greater the energy use, the greater the carbon footprint, and the worse for the environment a product is.

   3. _Phonetics._ The context in which a speech sound occurs. 1874 – 2003

1960 *Medium Ævum* **29** 27   There was evidently a phonemic distinction between forms which ultimately had the assibilated consonant and those which did not, even in the environment of front vowels.

4. The social, political, or cultural circumstances in which a person lives, esp. with respect to their effect on behaviour, attitudes, etc.; (with modifying word) a particular set of such circumstances. 1936 – 2005

1946 S. A. HAYAKAWA in W. S. Knickerbocker *20th Cent. Eng.* 47   In accounting for human behavior it postulates the 'neuro-semantic environment'—the environment, that is, of dogmas, beliefs, creeds, knowledge, and superstitions to which we react as the result of our training.

2006 *Sydney Morning Herald* 18 Nov. 47/2   Singapore's stable political, social and economic environment is no high-stakes gamble.

5. *Computing.* The overall physical, systematic, or logical structure within which (a part of) a computer or program can operate; the particular combination of operating system, software tools, interface, etc., through which a user operates or programs a system. 1961 - 2005

1986 *Micro Decision* Oct. 34/2   Windows and GEM are bundled with the machine, giving the user a choice of environments.

6. *Art.* A large three-dimensional artwork designed to be experienced from within. 1962 – 2006

1977 *Times* 19 Aug. 12/5   In the jargon of modern art, an environment is a work of environmental art: a form of art that encompasses the spectator instead of confronting him with a fixed image or object.

COMPOUNDS

C1. General *attrib.* and objective (chiefly in sense 2b), as **environment area**, **environment control**, **environment manipulation**, etc.

1913 W. G. ROSE *Success in Business* II. vi. 89   The passive man gradually comes to submit to all the influences that surround him. He becomes the subject of environment control.

1995 *Accounting Rev.* **70** 460   Structured firm managers were clearly not less sensitive than unstructured firm managers in perceiving the environment manipulation.

C2. General *attrib.* (in sense 2d). Cf. ENVIRONMENTAL *adj.* 2, 3a.

environment commission, environment commissioner, environment department, environment editor, environment minister, environment ministry, environment movement, environment officer, environment policy, environment secretary, environment spokesman

C3. Other compounds:

environment agency, environment committee, environment conscious, environment friendliness, environment friendly, environment group, environment issue, environment-minded

4: Linguistic Analysis

The significant semantic changes that *environment* undergoes, as described above, cannot be separated from the way the word is used grammatically. In this respect, *environment* is a word which shows significant interplay between syntax and semantics. In its early uses, where the word denotes the physical or non-physical surroundings of a particular entity, *environment* can be modified by the indefinite article *an*. Sometimes, it is (also) preceded by an adjective such as *perfect* or *hostile*; and very often who or what this applies to is explicitly specified somewhere else in the sentence: for example "a perfect Environment of Glands and Emunctories all around the Neck" (1725, at OED sense 2a). If an entity is not explicitly stated in this way, the entity nevertheless still tends to be retrievable from the context. For example, "Singapore's stable political, social and economic environment" (2006, at sense 4), is clearly described in terms of how it is experienced by people – the people in that environment. Where *environment* is modified by the definite article *the*, it tends to be preceded or followed by a phrase which specifies the relevant entity, making clear what particular *environment* is being referred to: for example *the environment of this loch* (1872, at 2a). In terms of these grammatical frames influencing meaning, however, a major change can be seen in the mid-20c, when *environment* begins to be used without modification but usually with a preceding definite article, as *the environment*. This is now a very familiar use, in which *environment* refers to the whole natural world (or sometimes an area or aspect of it) rather than the immediate physical context of a particular organism.

This important 'natural world' sense of *environment* (along with its derived form *environmental*) appears to account for a huge rise in frequency. This is evident. particularly from the 1960s, and is a linguistic change that invites consideration in broader social terms, as suggested in the essay below. Looking at common

collocations for both forms, *environment* and *environmental*, provides some further evidence related to the sharp rise in frequency. For example, the ten most frequently occurring words after *environmental* in the COHA corpus are *protection, health, groups, impact, factors, condition, problems, issues, law* and *quality*. With the exceptions of *health, condition, factors* and *quality*, these collocates indicate the 'natural world' sense (though not in every occurrence, particularly in the cases of *impact* or *conditions*). At the same time, the list also shows that uses corresponding to the 'immediate physical or non-physical surroundings' sense **remain firmly established**, and as a result both *environment* and *environmental* appear to exist in fairly stable states of polysemy.

The relationship between this group and semantically related words is complex and interesting. *The environment* is closely synonymous with *the natural world* (the expression used in the OED definition for this sense), and has the same positive connotations as the terms *nature* and *natural*, as well as (slightly less consistently?) *countryside*. However, *environment* is often used to mean more than simply *natural world* or *countryside*. It also reflects the word's earlier meanings, which encompass a notion of interaction between subject and environment. In very many instances, as a result, the word highlights the impact of the human 'inhabitant' on its surroundings, rather than vice versa. Indeed, in much of the popular press this contemporary sense of *environment* has become far more frequent than any other, in part reflecting the fact that it is the term used in the names of many governmental and non-governmental organisations, such as 'The Environment Agency' (UK), and 'The Environmental Protection Agency' (US).

Perhaps the closest synonym for *environmental* is *ecological* (even though the related nouns *environment* and *ecology* evoke different conceptualisations). But this word is notably less frequent in British and American English and there are important differences between the terms. In the second edition of *Keywords* in 1983, Williams suggested that "Ecology and its associated words largely replaced the *environment* grouping from the late 1960s"; but corpus evidence does not seem to support this statement if frequency is the measure of 'replacement', at least in more recent decades. If the measure is one of prominence in public discussion, rather than frequency, then it is arguable that the placement displacement of *environment* by *ecology* seems still less likely. As a group, *ecology, ecological* and *ecologist* have more 'scientific' connotations than *environment*, *environmental* and *environmentalist*; and this may be why those terms have remained more restricted in their patterns of use. An *ecologist* is typically a qualified professional, whereas an *environmentalist* is as

likely to be an enthusiastic or committed amateur or generalist. The phrase *ecologically sound* as a result appears more precise than *environmentally friendly* or another partial synonym which makes such concerns seem more informal and accessible, *green*. On a larger scale, the *environmental movement* seems to have largely taken over from earlier *ecological movement*, and *environmental* has increased in use in other collocations, while *ecological* appears to have had a more steady use. One further difference between the two clusters of terms is that *ecology* does not have an everyday sense equivalent to *environment*, and this may also be in part responsible for growth in frequency and use of *environment*-related terms. There is nevertheless one important exception to this tendency: use of the prefix *eco-*, which benefits from being 'snappier' than alternatives and is responsible for a large number of new forms, including relatively established *ecotourism* as well as more recent coinages such as *eco-bling*, *ecovore* and *ecosexual* (the last of these 'a person who has a very strong interest in environmental issues affecting their lifestyle and choice of romantic partner', as defined by the 2011 *Macmillan Dictionary* Green English buzzwords list).

5. Essay

The history of *environment*, as outlined above, shows significant development in the word's meanings. Where *environment* is used to refer specifically to humans in their surroundings, such changes have resulted in a range of possible emphases: from humans being situated in their "surroundings" (OED 2a), through being "affected" by and "interacting" with those surroundings (OED 2b), to "having an impact on" them (OED 2d). Use of *environment* to indicate the last of these relationships (human "impact" on natural surroundings) has been dramatically highlighted recently in the use by some geologists of a new expression, *Anthropocene period* rather than *Holocene period,* to characterise the present epoch in Earth's history. What connects the neologism *Anthropocene* with *environment* is not only that *Anthropocene* defines the current period based on human transformation of the planet but that proponents of the idea give a start date for the period, based on geological evidence, that is roughly simultaneous with first attestations of *environment* in its "surrounding natural world" sense. Whatever merit is to be found in such coincidence, however, the important questions about *environment* in contemporary discourse are not so much to do with this recent use of the word as questions about the relationship between that sense and the word's continuing, other meanings.

One immediate difficulty with *environment* is whether, and if so how far, the word retains its relational meaning of "surroundings" when used to mean "the natural world, countryside, or unspoiled place". This meaning appears not to be concerned with specific surroundings but with a default or generalised, 'overall' domain, hence increasingly common use with presupposing "the": 'the Environment'. As a result, what we consider "environment" to be can vary greatly, not only in reference but in scale and duration: from local and temporary experience of a particular place up to global processes such as wind patterns, ocean currents and changing climate. Such variation in scale partly reflects people's historically experienced environments and the amount of information available to them. For much of human history, social relationships were organised around local settlements, and structured intangibly by hierarchies and customary behaviour in ways that together created relatively contained "ecosystems". What lay beyond the horizons of such lives was experienced largely through myths and accounts such as travellers' tales. Over time, social changes have gradually increased the scale on which vast numbers of people conceive their "environment": from local spaces, through regions and countries, towards varying degrees of awareness of world-level geographical and political relationships. By the time the "natural world" meaning of *environment* appears in the second half of the 20th century, such shifts of scale had resulted for billions of people in a new phase of global self-perception, underpinned by international travel and institutions, and readily visualised through photographic imagery of planet Earth as a single whole when viewed from outer space. At the same time, the Earth was revealed as vulnerable to new threats of annihilation, not only as the result of recent use and subsequent proliferation of nuclear weapons but also (as a kind of *environmental apocalypse)* from apparently "natural causes". The horizon of what "environment" is continues to recede. There is still a conventional boundary at the level of planet Earth, rather than "environment" extending into the massive amounts of space beyond. But even that boundary is stretched by recent plans for space station tourism and the establishment of human settlements on other planets, increasing environmental concerns about pollution of space by rocket and satellite debris.

The recent history of the word has been an important phase in its development. The rapid rise in frequency of *environment* in its "natural world" meaning during the 1960s coincided in social terms with increased public awareness of humans' destruction of their own surroundings. Resulting tensions reflected in the word have increased in parallel with accumulating (yet continuously disputed) evidence

of detrimental change, including global warming, degradation of natural resources, and water shortages. Over the same period there have been particular moments of urgent concern, such as the 1985 discovery of a hole in the ozone layer over Antarctica, recent graphic evidence of the rapidity of deforestation of the Amazon basin and associated loss of biodiversity, plastic bags found in the Pacific Ocean's Mariana Trench, and the collapse of polar ice shelves and visible retreat of glaciers worldwide.

Shifts of perception on this scale regarding what "the surrounding world" is like almost inevitably clash with established notions of how "the natural world" has been represented. In response, audiences have shown new kinds of interest in connections between social and aesthetic issues and the possibility of transforming perception of "the natural world" into understanding of "the human environment". Scientifically, alongside research in already established disciplines *environmental science* has emerged as a multidisciplinary field linking together biological, geological and political aspects of the current situation. Artistically, the vulnerability of the natural world to destruction by humans has problematized assumptions which made possible bucolic retreat from urban life into the countryside as well as pastoral allegory, also challenging religious evocations of the world as a well-tended, divine garden. Politically, the period since the 1960s has seen the emergence of *environmentalism* as a recognised protest and campaigning movement, with Greenpeace founded in 1969 and Friends of the Earth in 1971. Partly in response, government and other public authorities have been charged with responsibility for "the environment", such as the UK's "Department of the Environment" in 1970. An influential UN conference in Stockholm in 1972 promoted concern for "the human environment" by highlighting "limits to growth", urging conservation in the face of economic and political orthodoxies that have prioritised development reliant on extractive industries and industrial expansion. This is the context in which *environment* has been gradually adopted as a prominent media category for news and opinion on topics as diverse as science and politics, modes of artistic representation, travel choices and lifestyle.

Understanding what "the environment" is, however, may still be less difficult than assessing what such an environment does or what is done to it. Beyond the word's dictionary senses, *environment* conveys thicker, cultural conceptualisations. This is because, as well as reflecting past and current use those dictionary meanings encapsulate nuanced, often contested, patterns in the history of ideas, including technical concepts in a number of specialised fields; and such ideas are

presupposed or implied by use in particular contexts. Some of the ideas in question developed far earlier than the relevant, modern use of *environment*, and relate closely to traditions of seeking to understand the relation between humans and the world through concepts such as "nature" and "culture". Partial overlap in meaning between *environment* and the immensely complex word *nature* has resulted in a transfer of some associations and implications from *nature* to *environment*, such that the "natural world" sense of *environment* inherits, but also inflects, ideas mainly developed in relation to earlier and continuing uses of *nature*. The ideas and positions are highly complicated. But some contrasts and connections can be highlighted by working outwards from the dictionary definitions of *environment* described above.

Questions about where humans are in a general scheme of the world, or whether humans are somehow outside any such scheme, have posed persistent difficulties in many cultures and periods. Because the meanings of *environment* now include both relational ("surroundings") and non-relational ("natural world") possibilities, modern use of *environment* straddles such religious and philosophical issues, albeit inconclusively. Use of the word allows humans to be treated either as prime agents in the natural order or as insignificant creatures in a greater environmental drama, whatever its trajectory or final outcome, in such circumstances deflecting the problematic issue of human exceptionalism.

Religious and philosophical understandings before the emergence of, and continuing alongside, human-centred views of the natural world have tended to picture the world by means of "universal" schemes of being (a cycle of life, natural order, a chain of being). In such schemes, humans have typically occupied an integral but subordinate position. Conceptions along such lines were (and are, where they continue) saturated with cultural and religious significance, whether pantheistic or involving deities; and representations of the natural world are not only observations or description but acts of worship or propitiation. Humans in such a view are part of, and linked to, a living world that is understood as consisting of uncontrollable natural forces including storms and tides, and magical or intimidating places including mountains and forests. In religious frameworks, it has been an essential task to reconcile how such a subjugated relationship to the living forces of Nature can fit with human purpose and a belief in creation as the expression of a creator. While devotion to abstract Nature may now seem less influential, at least in Western religions and thinking, resonances may still be felt in some viewpoints on "the environment", ranging from intuitive trust in the

protective auspices of Mother Nature through to Lovelock's Gaia Hypothesis, which propounds the notion of a synergistic and self-regulating system that perpetuates conditions on Earth.

In varying degrees of contrast with "forces of nature" beliefs, a cluster of humanistic traditions, both religious and secular, have claimed a special place for humans as the point of observation, judgement and interest within whatever the larger conditions or scheme of life may be. In such frameworks, which are carried over into uses of *environment*, humans are still part of their natural surroundings but are the highest point of creation, or exceptions to the natural order, having either been created or emerged as a separate or even unique category of being. On this conception, *environment* can seem exactly "surroundings": the backdrop to a human narrative, there merely to supply resources for instrumental use or industrial transformation. Tensions within this tradition were explored extensively in Enlightenment speculation about the pre-social "state of nature" against which human characteristics and interests might be judged, and which set the terms for distinctively human organisation: the social contract entered into by individuals in the formation of society. Such an imagined state of nature might involve peaceful and contented existence, in the environment of a bountiful, earthly paradise; or it might involve bitter struggles for control over nature and other people, with the only escape being acquiescence in the guardianship of a tyrannical leader. The content and implications of developing positions differed substantially from Hobbes through Locke to Rousseau, but an assumption ran through all of these frameworks of a separation between humans and nature.

As recent use of *environment* has converged on semantic space occupied by *nature*, that dualistic aspect gives rise to an anthropocentric view seemingly in tension with nature-centric accounts of how humans inhabit their environment. If what distinguished "nature as a living force" was that what might now be called Earth systems were ultimately dominant over human ones, then from the Early Modern period onwards concepts of nature which now form a substratum in the meanings of *environment* have offered a more human subject-centred understanding. Artistically, traditions of landscape painting have lent support to this conception, with the painter's viewpoint outside and framing the space of natural landscape depicted. But such separation between humans and their surroundings is not confined to artistic discourse; Einstein, for instance, is reported to have commented apparently simply that, 'The environment is everything that isn't me.'

The relationship that exists between humans and the natural world, in or out and which of the two dominates, is an important issue in what *environment* conveys. This is not least because of implications as regards the kinds of interaction that may take place between them. Three main kinds of interaction stand out, which may be presumed, implied or further developed in any given context of use of *environment*.

One influential conception is that the relationship between environment and humans is one of causal influence. This conception is OED sense 2b, identifying not only physical surroundings or conditions in which a person or other organism lives, but also the external conditions affecting his or her life or existence. In different contexts, such views were especially prominent in the 19th and 20th centuries, ranging from intuitive notions of cause and effect, through anthropological beliefs in the effect of climate on human behaviour and character, and artistic representations of social causation in realist literary fiction, to systematic theories of determinism by selection and adaptation in evolutionary theory and of conditioning in psychological behaviourism. The directly expressed concept of *environmental determinism* foregrounds how environment shapes or moulds human beings, by claiming that environment, frequently as opposed to heredity, is the primary influence on the development of a person or social group. The idea of environment as a shaping force is further reflected in general linguistic usage, where the most frequent verbs expressing what effect *environment* has include *influences, changes, shapes, affects,* and *fosters* , as well as slightly less frequently but with greater force, *dictates* and *determines.*

The idea that people are shaped or moulded by, and so are in some sense a product of their habitat and upbringing, can in some circumstances seem deterministic in a further sense: that of suppressing or even ruling out agency in relation to whatever conditions are encountered. The other two forms it is important to highlight regarding interaction between humans and their surrounding which are implicit in use of the word *environment* are both concerned with the issue of agency, either as a restricted form of after-the-fact resistance or as more proactive intervention, either of which may have either destructive or restorative consequences.

While not necessarily showing great agency, one alternative conception to being actively moulded by environment is a feeling of being excluded from what is assumed to be a different, better and typically earlier environment that might have supported a sense of *environmental belonging*. Such a view, whether simply feltor

directly articulated, may be expressed as an idealising or romanticising of that environment, or alternatively in friction between humans and the environment they consider themselves to be actually living in. General and powerful examples of such a sense of environmental exclusion or alienation include religious responses to the idea of a Fall resulting from expulsion from the Garden of Eden, the Classical idea of decline from an imagined Golden Age, and nostalgia for the particular surroundings of a lost country or home, or of an earlier period in general. One illustrative case, in which the word *environment* is especially prominent, is Leavis and Thompson's book *Culture and Environment* (1933), a work which sought to promote critical thinking defending "the cultural environment" (viewed as a traditional way of life that placed a high value on heritage and community) against modernity and a kind of social alienation thought to have taken hold as a result of the Industrial Revolution. In Leavis and Thompson, the word *environment* is used in a number of ways. In some uses, *environment* refers to an ordered social equilibrium to be found in "immemorial experience" and "the natural environment and the rhythms of the year". Combining the turning of the seasons with a preindustrial, agricultural and craft mode of production and related social customs, Leavis and Thompson suggest that, "Men in such a relation to the environment and one another constitute a human environment*,* an organic community." [p86]. If, however, that claimed organic community is damaged, in this case by industrial production, and turned into a "modern environment" with its accompanying media and advertising, Leavis and Thompson contend that society should not leave a person to be "formed unconsciously by his environment", as they imply would happen in a "healthy" state of culture. Rather, people should be trained by means of an "education against the environment" [p.106] to discriminate and resist. What an "environment" is, in such thinking, is not well defined but may extend to something remembered or imagined, and contrasted with present surroundings considered to have a negative impact on people; the claimed negative impact then forms a basis for environmental resistance. The formula of this kind of argument about past and present environments is a familiar one, and raises important questions about what differentiates measures which are environmentally conservationist from ones which are merely conservative.

Finally as regards different forms of interaction between human and environment, in the reverse direction of deterministic influence or causation humans can be dominating agents who have a major *environmental impact*, potentially on a scale that may even destroy that environment. What *environmental impact* then means needs to

distinguish – in some cases on obvious evidence, but in other cases far more carefully than we typically do – between kinds of impact that are destructive and others kinds urged by campaigners, policy makers and innovators recognising a threat and seeking to redress a present level of environmental damage through future-oriented intervention or management. Some strategic interventions may inevitably appear less to be less a matter of conservation than of *environmental engineering* (e.g. the development of windfarms, carbon trading, or policies aiming at net zero emissions). Both kinds of impact, within which there are many gradations, are expressed but not differentiated in informal use of the word *environment* itself. The top five or six processes associated with what human presence does to the *environment* cover both kinds: degradation, destruction, pollution, preservation, protection and conservation.

All these semantic difficulties at stake in *environment* are present wherever problems and plans are in question regarding development of what is to be understood as a *sustainable environment*; and the scale of conceptual challenge involved can be highlighted further if *environment* is located within its semantic field of related words, especially partial synonyms introduced above including *ecology, locale, Earth, the Planet,* and *nature.* A Google Ngram comparing relative frequency over time of perhaps the three closest terms – *environment, ecology* and *nature* – shows unsurprisingly that *nature* has been more frequent in use than either of the other two throughout the periods in which two or all three of them have been available. This is undoubtedly a significant factor, though not the main reason, why Williams's looks particularly carefully at *nature* both in his lengthy entry for the word in *Keywords* and in his detailed investigation of historical representations of "nature" (and its connections with land-use, agriculture and commerce) in *The Country and the City*, an analysis organised around the two additional key words in that book's title. Within the wider comparison between *environment, ecology,* and *nature*, it is also notable that *environment* has been consistently more frequent than *ecology* throughout the period in which both have increased in relative frequency in the language at large (*environment* rising more steeply than *ecology*). *Nature*, on the other hand, has followed a downward trend, with minor reversals in relative frequency, since a high point in the 1790s. Inevitably such data have limited interpretive value, however, because both *environment* and *nature* (less so *ecology*) have multiple meanings. An Ngram comparison of the three is not only dependent on the dataset of digitised print material from which it is derived but also involves generalisation across multiple senses prompted by each word in different and changing contexts.

Tracing the meanings of related terms in this semantic domain appears more complicated because of practical considerations in choosing where to start. For the 1983 edition of *Keywords*, Raymond Williams in fact did not choose to add *environment* as his keyword but rather *ecology*. He claimed that the current 'key word' was *ecology* based on his personal reading, and that *ecology* seemed to be replacing earlier use of *environment*. To support that claim, in the resulting entry for *ecology* Williams pointed to an observation by HG Wells: that economics forms part of "the ecology of the human species". Williams then suggests that this idea,

> "anticipates important later developments, in which *ecology* is a more general social concern, but at first the commonest word for such concern with the human and natural habitat was *environmentalism*.…"

Arguably differences between the two words have increased subsequently, including as regards their respective registers. *ecology* shows predominantly technical use, and in such use describes the interaction that takes place among species as well as between species and their respective habitats or niches. The overall global ecosystem includes humans, who are not separate because in the overall ecosystem all life-forms are interconnected. Importantly, however, notions of ecology make no concession or commitment in relation even to the survival of any particular species, including humans. Rather, from a purely ecological perspective humans might simply disappear, displaced by other life forms, since ultimately what guides continuity of life or extinction is a larger process of selection and adaptation under given but not fixed external conditions. In contrast, an alternative, anthropocentric interpretation is available for *environment*, one that can appear to subjugate the forces and challenges facing humankind, relegating them to the status of a backdrop to the human, as "surroundings". The human-centred focus of *environment* accordingly offers a potential that is absent from *ecology*, to galvanise change in human behaviour even in the face of otherwise possibly catastrophic destruction.

Towards the end of one entry in *Keywords*, Williams points to particular complexity in understanding topics including evolution, habitats, and life as understood in evolutionary theory through the words we use in these areas. Pointing to problems of level between detailed particulars and keywords as "general category" words, Williams comments:

> "The extraordinary accumulation of knowledge about actual evolutionary processes, and about the highly variable relations between organisms and

their environments including other organisms, was again, astonishingly, generalised to a singular name."

In highlighting the "highly variable relations between organisms and their environments", however, Williams was in fact not writing about *environment*, as might be thought. Nor was he discussing the new word he had chosen for the 2nd (1983) edition of *Keywords*, which as pointed out above was *ecology*. Rather, he was referring to *nature*, perhaps the other and most difficult word with which it is important to remember *environment* is in dialogue.

Very often we may think we assess modern *environmental campaigns* and their related controversies purely on the basis of evidence and policy. But such assessments are always also to some extent negotiations or mediations of the kinds of conceptualisation outlined above, which thicken the meanings of *environment* that we can find in a dictionary with presupposed priorities, values, and implications. If urgent practical challenges in *saving the environment* are to be addressed, then conceptual issues surrounding what *environment* means need to be traced more closely through to the definitions and interpretations in use in relevant professional fields. Closer and more carefully examined connection between these two levels is needed in order to strengthen frameworks for assessing and communicating research evidence in general, as well as in order to convey more effectively what is meant by specialist terms such as the *built environment*, with its *environmental impact statements* used in planning applications and more general techniques and influence associated with *environmental consultancy*. The conceptualisations at stake are obviously difficult. They are not verbal senses as the term is typically understood, but rather ways of thinking which radiate out from verbal meanings into larger patterns of discourse, structures of ideas, and social values.