

In Pursuit of the Future *Glossary of Concepts*

Words italicised in the text below refer to other glossary entries.

Abstract future

The future interpreted as a predictable product of the past. This is the future as known to classical Newtonian science, in which mathematical laws based on past observations accurately describe the future position of bodies. It is the result of regular combinations of natural events governed by unchanging laws.

Commodification of the future

Treats the future as an economic resource where the potential benefit of an action is calculated in terms of its expected return for the present. The future is fully commodified once economic reasoning about profit and loss has become the dominant social form into which ideas of progress are translated. See also *Discounting the future* and *Empty future*.

Care

The everyday term, which inescapably encompasses the future, takes on specific significance in the philosophical thought of Martin Heidegger (1988/1927) where it forms the basic character of all human dealings with the world. Nothing is encountered without it ‘mattering’ to us in terms of our ‘projects’ which extend us temporally beyond experience of an ephemeral present.

Conatus

Latin term used in medieval philosophy to refer to a basic drive towards self-preservation inhering in living things, having its root in *conatur*, ‘to endeavour’. It is used by Hans Jonas (1982/1968) to describe the fundamental involvement of all life forms in their own futures and stipulated to operate from the level of cells upwards. See also *Lived future*.

Constitutive Value

Is being valuable as a part of something else, but only insofar as it is allowed to exist in its own right and for its own sake (e.g. the value of people, things, institutions and ideas insofar as they contribute to the flourishing of networked relationships across space and through time). It is to be contrasted with intrinsic value (the value something has in itself, independent of its relation to other things) and instrumental value (something valuable for the sake of obtaining something else).

Dasein

Heidegger’s (1988/1927) term for ‘human being’, meaning literally ‘there-being’. It entails that we experience the world as unfinished, as always requiring something more from us, thus we are always ahead of ourselves. *Dasein* is a characteristically human form of the *lived future* and inextricably linked to futurity.

Discounting the future

Refers to the economic standpoint of the present and is associated with the assumption that the value of a good diminishes with the passage of time. When applied to environmental problems, for example, it means that temporal distance reduces potential hazards to insignificance, e. g. potential environmental damage costing \$1,000,000 in one hundred years time, discounted at a rate of 10% is reduced to a cost of \$73 of hazards for the present. See also *Commodification of the future* and *Empty future*.

Disembedding futures

The process whereby specific social contexts and personal biographies are emptied of content and abstracted from their unique historical location. The practice arises with the advent of discourses of progress, economic reasoning and the belief in the technological transformability of the world. See also *Empty future*, *Commodification of the future* and *Frontier spirit*.

Divination

Practices of telling the future which rely on experts (such as oracles and seers) who read signs within the present to trace their pre-given patterns of the future. The key assumption of such practices is that the future already exists. This assumption is gradually discarded once cultures adopt *knowledge practices* that view the future as subject to human transformation. See also *Open future*, *Progress* and *Prophecy*.

Empty future

A pervasive *habit of mind* which regards the future as entirely void (apart from the results of our actions), thus essentially ours to fill with content and transform whilst approaching it solely in terms of its relationship to present interests. The idea that unrestricted economic growth is a primary good is perhaps the most influential contemporary example of the dominance of empty futures. See also *Commodification of the future* and *Discounting the future*.

Facta vs futura

A distinction established by Bertrand de Jouvenel (1967) for the social study of the future. It assumes the future to be open. *Facta* are past events and material things whose influence on the present is the concern of scientists and historians. *Futura* are possibilities that have not yet come about, things and events that will become *facta* only after they have occurred. The distinction implies that facts are material thus real while the future is immaterial, its primary domain being the human mind.

Foresight

A method of future studies designed to establish what possibilities are closer to realisation for a given actor (group, corporation, society) than others. It assumes that the future is more or less open to influence from the present, and that a degree of prediction is possible.

Frontier spirit

Adapted from Jeremy Rifkin's (1994) term 'frontier mentality', it refers to social practices of future making which demarcate, colonise and transform unutilised territories (wilderness) into economically profitable resources. A key characteristic is its strong future orientation and a break with the past that severs established chains of obligation. See also *Disembedding futures*.

Future present

As a standpoint it positions us with reference to deeds and processes already on the way and allows us to accompany actions to their potential impacts on future generations. It enables us to know ourselves as responsible for our *timeprint* and the *time-space distantiated* effects of our actions and inactions. To take that standpoint, however, requires that we first understand invisible process futures in progress as real and *living*. See also *Present futures* and *Present futures vs future presents*.

Futures in the making

Actions that have not yet materialised into symptoms. Although not yet congealed into fixed,

empirical facts (thus inaccessible to the usual methods of scientific investigation), they are nonetheless in progress. They are in the process of working themselves out, implying that futurity is ongoing and inescapably incomplete. As processes they are real (effecting reality or *Wirkwelt*) despite not being material in the conventional sense (phenomenal world or *Merkwelt*). See also *Latency, Merkwelt vs Wirkwelt, Natura naturans vs natura naturata, phenomenal vs effecting reality, product vs process understanding*.

Futurology (Futures Studies, Futurism)

The study of futures which is approached from the standpoint of the present and works with de Jouvenel's (1967) distinction between *facta* and *future*. It assumes the future to be open to human transformation and makes methodological distinctions between the study of probable, possible, and preferable futures.

Habits of mind

Unquestioned, implicit assumptions that form the basis of *knowledge practices* and thus help to construct social environments, making some aspects of the world visible and tangible while neglecting others which are thereby rendered invisible.

Instantaneity

The capacity to compress duration to zero and communicate in *real time*, that is, in the present now. Where previously instantaneity was reserved for face-to-face communication because the movement across space took time, electronic modes of communication and most specifically ICTs have severed the link between time and space and reduced waiting times to close to zero, irrespective of the number of participants involved and distances to be covered. See also *Simultaneity*.

Knowledge practice

Stresses the performative nature of knowledge, the way it constructs its object and helps to create it. It emphasises the active and constitutive side of knowledge and conveys our belief that transformed understanding and new knowledge change our action potential.

Latency

Refers to futures which are 'on the way' but have not yet materialised, thus cannot be predicted or prophesied with any degree of certainty. Pregnant with the future it directs attention to *future presents* which are real despite not yet having congealed into empirical form. See also *Futures in the making, Merkwelt vs Wirkwelt and Natura naturata vs natura naturans*.

Lived future

The way humans and other living entities experience their world as something in the process of being made, anticipate its changing form and participate in its production. See also *conatus*. Organisms adjust and adapt to the potentials present within their environments while humans further involve themselves emotionally, imaginatively and cognitively with the near and distant future, thus extending themselves through care from *present futures* into *future presents*. See also *Living future*.

Living future

Refers to halos of evolutionary potential that surround and permeate individuals and make it possible for them to transform others and be transformed by them in surprising and unintended ways. It is neither pre-formed and pre-determined nor fully indeterminate, empty and open to endless transformation. Rather, it is an embedded future which possesses the still-to-be-determined

character of collective *futures in the making*.

Memory of the future

A perspective on the past that views it not as a collection of historical facts but rather as predecessors' images, plans, visions, ambitions and concerns for the future, which either came to fruition or remained unrealised.

Merkwelt vs Wirkwelt

Introduced for (socio-)biological analysis by Jakob von Uexküll and Georg Kriszat (1983/1934), these concepts distinguish between a world that is accessible to our senses (the phenomenal world), and a world of processes and forces that is the source of visible outcomes (the 'effecting' world). See also *Latency, futures in the making, phenomenal vs effecting reality, product vs process understanding*.

Natura naturata vs natura naturans

Two viewpoints on nature, for which Spinoza's *Ethics* (1992/1677) is often cited as a source. *Natura naturata* is the Latin term for the world considered as a set of natural products that have congealed into stable and definite forms, whereas *natura naturans* refers to an ensemble of ongoing processes and forces that produces these products. See also *Futures in the making, Latency, Merkwelt vs Wirkwelt, phenomenal vs effecting reality, product vs process understanding*.

Non-reciprocal responsibility

Responsibility which does not imply reciprocity, such as the duty to care for a dependent. Responsibilities to the future that derive from our ownership of the consequences of our actions are necessarily non-reciprocal, given that those yet to be born are in no position to reciprocate.

Open future

The contemporary future is no longer assumed to be predestined but subject to human shaping and transformation. As such it has to be actively chosen and produced which goes hand-in-hand with an affirmation of collective responsibility for the future. See also *Perfectibility and Progress*.

Perfectibility

The doctrine that human beings can transform themselves through the emulation of the divine or knowledge of perfect eternal forms. Introduced in Ancient Greek Orphic religion and, through the cultural influence of neo-Platonism, it became a central assumption of natural philosophy and early social science. It marks a decisive shift away from the belief in pre-given providential futures and towards a future that becomes increasingly open to human influence and effort. See also *Open future*.

Phenomenal reality vs effecting reality

Translations of the German terms *Merkwelt* and *Wirkwelt*, designed to distinguish between reality as a collection of spatio-temporally bounded material facts available to us through our senses, and reality as the ongoing processes which generate these facts and which extend beyond them, in many cases out into the distant future. See also *futures in the making, latency, Merkwelt vs Wirkwelt, natura naturans vs natura naturata, and product vs process understanding*.

Politics of posterity

Political decisions that have the capacity to create major consequences that will affect countless future generations who are without voice or vote. As such it opens up questions about what forms

of institutions can be legitimate in the light of such extended responsibilities for which there is no political mandate.

Probabilistic prediction

Methods of predicting the future based on statistical evidence which are focused not on individuals and unique events but on aggregates and collectives of these. It forms the basis of early social scientific approaches to the future and has been honed by economists for the study of long-term trends in the hope of predicting cycles and other patterns of economic change.

Product vs process understanding

The world we live in and create can be understood in two divergent but ultimately mutually implicated ways: as product and as process. We have access to products of social and natural processes through our senses. They are composed of spatially bounded matter, and can be understood through quantification. The processes that produce them are, by contrast, invisible to us. They encompass the temporal dimension of their products, extending into the past out of which they arose and into their futures. They are intrinsically incomplete and ongoing, and are recognisable only retrospectively. See also *futures in the making*, *latency*, *Merkwelt vs Wirkwelt*, *natura naturans vs natura naturata*, and *phenomenal reality vs effecting reality*.

Present future

Refers to approaches to the future from the standpoint of the present through which we seek to predict, transform and control the future for the benefit of the present. It projects the future as a terrain that is *empty*, *open* and subject to colonisation. From this standpoint the factual present is real while *future presents*, *latent futures* and *futures in the making* lack reality status.

Present future vs future present

Introduced to social science by Niklas Luhmann (1982: 281) who suggested that the present future is rooted in a utopian approach which allows for prediction whilst the future present is technologically constituted and as such enables us to transform future presents into present presents. The distinction plays an important role throughout this book, but is developed here in a different direction. We show that the divergent standpoints involved affect not just our action but also our ethical potential: responsibility for the future requires that we are able to take the standpoint of the future present and have the capacity to move knowledgeably between the two approaches.

Progress

An approach that views the future as arising from actions in the present (rather than being pre-given) and tied to the creation of *present futures*, the aim being the production of happiness through the control of nature in a world of pure potential that is subject to human design and the conscious application of technical knowledge. An unintended but inescapable consequence of the change from *providence* to progress is the contemporary rise of uncertainty and indeterminacy to previously unknown heights.

Promethean power

The capacity, evident in contemporary *knowledge practices* in science, technology, politics and economics, to construct and produce futures without being able to know and take responsibility for the consequences of this future-transforming and traversing power. See also *Structural irresponsibility*.

Prophecy

Telling the future on the basis of divine or other-worldly inspiration where experts act as media or

mediators. It assumes supernatural ownership of a future that is pre-given, produced through the workings of supernatural agencies or fate. See also *Divination*.

Providence

The workings of a supernatural agency that is conceived of as owner of the future and believed to exercise overall care for events, secured by a promise or covenant that brings a people (or humanity as such) into the sphere of divine concern. When human beings begin to assume ownership of the future and start to shape it to their design, the belief in providence tends to be deposed from its dominant cultural position and replaced with the pursuit of *progress*.

Real-time action

Social action viewed as taking place in the present, unaffected by the spatial distances involved and made possible by advanced communications technologies. See also *Instantaneity* and *Simultaneity*.

Scenario planning

A plausible description of possible futures, based on coherent and internally consistent sets of assumptions about key relationships and driving forces (e.g. new technological developments, CO₂ emissions, prices). Scenarios are not predictions of what *will* happen; rather they enable the exploration of possible, probable and preferable futures.

Simultaneity

Is action at the same time and refers to the creation of a shared present irrespective of the number of people and the spatial distances involved which is vastly enhanced by the development of information technologies. 9/11 was an event where people with access to a television could share in the global present of this event as it was unfolding in *real time*. See also *Instantaneity*.

Structural irresponsibility

Is constituted at the institutional level of modern industrial societies. In globally networked relations it is produced where the pursuit of *progress* and innovation creates ever greater *timeprints* marked by fundamental uncertainty and indeterminacy while the key institutions (the economy, politics and law) make responsibility dependent on knowledge. In addition, long-term policies routinely pursued by contemporary liberal democracies transgress the temporal boundaries of their political mandates and realms of jurisdiction. In such cases the resulting impacts and costs are in effect externalised to other nations and successor generations, thereby moving the problems outside the institutional sphere of responsibility.

Timeprint

Emphasises the temporal reach of actions without neglecting space and matter. It draws attention to the way that certain *knowledge practices* lead to a consumption of future potential, or appropriation of successor's futures. It alerts us to the problematic relation whereby current future-making extends far beyond any capacity to match our concern and responsibility to the temporal reach of our actions. As such it is the temporal equivalent of the 'ecological footprint', which is based on space and matter, as it refers to a measure people's demand on nature and compares human consumption of natural resources with the earth's ecological capacity to regenerate them. See also *Structural irresponsibility*.

Time-space distantiation

A term introduced during the early 1980s by the sociologist Anthony Giddens (e.g. Giddens 1984) for the analysis of social modernity which highlights the tendency of actions to have their effects stretched ever further across time and space. It covers both intended and unintended consequences

which, due to their global interdependency, can rarely be traced back to their originating actions.

Trading the Future

Is a specific economic practice based on the idea that a promise to buy or sell a commodity at a particular price and specified future date can serve as a means of producing profit and warding off risk. We use the term in the additional sense that one empty future is assumed to be exchangeable for another, which contrasts fundamentally with embodied, embedded and contextual futures which attach to unique beings and events and are thus unsuitable for abstract exchange. To assume *empty futures* means that any one of a range of possible futures can be realised, depending on what we in the present desire. See also *Abstract future*.

Utopia

An imagined future state of perfection, attained by *progress*, that overcomes current limitations on human potential. Images of utopian societies became a major theme of European literature from the 1500s onwards, being initially located in geographically distant places, but later transferred to the temporal realm of near or far futures. Alongside *perfectibility* and *progress*, it marked another point of departure from the belief in *providence* and predestination. See also *Present future vs future present*.

Valorisation of speed

Speed provides evolutionary, economic and military advantages. Economically, the speed of achieving a given financial return is a variable in determining efficiency and profitability. Environmentally it is a variable in energy consumption and pollution. In contemporary contexts where the *timeprint* of social practices steadily increases, the valorisation of speed narrows the temporal focus to the present, thereby decreasing our capacity to take a long-term perspective and accompany actions to their potential *time-space distantiated* effects.