

# Supervenience and 'Should'

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## Introduction

Concerning any entity or any fact, we may wonder how does it fit into reality as a whole. We thus raise questions of the type: *What is the place of – in the scheme of reality?* As the placeholders for '–' we may put stars, atoms, populations, societies, histories, human beings, languages, works of art, numbers etc. These are mutually related in a variety of ways. In order to account for those multifarious relations, we organize them into a system. The guiding principle of such an organization is that things and facts are not disconnected but depend on each other. Certain entities and occurrences depend for their existence on certain other entities and occurrences. We are dependent for our existence on our ancestors; we are connected to them through causal lines of heredity. There is also a more conceptual kind of dependence: for instance, to be sentient depends on being alive – non-living beings cannot be sentient beings. Stones do not perceive, let alone think.

This dependence has been expressed in philosophy by saying that the property 'sentient' *supervenies* on the property 'alive', or the fact 'a is a sentient being' *supervenies* on the fact 'a is a living being'. Supervenience means dependence, determination, and necessary condition; to these relations are added the claims of reducibility and explainability. A supervening property or fact can be reduced to the property or fact on which it supervenes; and by that, it is explained by the latter. Reducibility claim means that the former is to be "nothing but" the latter, organized in a proper way. An adequate explanation makes understandable why this is so.

We may extract from the foregoing consideration the question: *Could – be removed without removing – thereby?* If not, then the latter is a necessary precondition of the former; thus, for instance, being alive is required for being sentient. This gives a partial answer to the above question of the "place of –" in the scheme of nature, in respect to the facts and properties concerned in the example.

If supervenience is a thoroughgoing universal factor in reality – and in our account of reality –, then it sounds reasonable to extend its sphere from nature to culture. Here reductive explanation meets some challenges. Sport clubs, societies, states, etc. may be reducible to psychology – and by this, all the way down to physics. Concerning numbers, they are conceptual entities that may be reducible to logic (cf. the logicist program of Frege and Russell), but presumably not to counting, or to any other actions. As to works of art, one may claim that, e.g., a painting is reducible to the composition of its ingredients, i.e., colour spots on a canvas, or an orchestral work to the sound waves that vibrate in the air in a certain way, etc. However, the question of their aesthetic value is a harder one: would not the value that they have, exceed the evaluations given to them by various persons? Correspondingly, common morality may be reducible to social and psychological facts, but what about the claims that being moral presents to us – are not these irreducible?

Let us focus on the issue of values and norms. Above, properties and facts were considered as supervening entities. Among facts belong actions performed by human beings. Evaluating, esteeming, commanding and

requiring are human actions. If the idea of supervenience is pursued consistently, these actions are traced back to facts concerning nervous systems of organisms, and subsequently all the way through to the undulations of elementary particles.

However, are the very values and norms thus reduced? Challenging this, one may appeal to the gap between 'is' and 'ought', as seen by David Hume. It may be that values and norms are not accountable by supervenience. Or, if they are, then they are reducible to facts – facts organized in a proper way, whatever that may be. Examples of such facts can be certain features in works of art, in human actions, in society. One may also try to base values and obligations on acts of esteeming and requiring. Hume did not exclude the possibility of accounting 'ought' through 'is'; he just raised the question of how the production of an 'ought' from an 'is' is achieved, and justified.

Below, the following *thesis* will be defended: it is questionable whether values and norms *sui generis* are reductively explainable – and thus, whether they supervene on facts. This worry arises due to the 'is/ought'-gap.

## 1. Supervenience accounting for facts

We construct systems of science with their branching sub-systems; and we claim that such a system adequately represents reality. Thus, there is "the real order of things" and the order that we make in order to account for that (cf. title of Molander (1982)). This is the basis for the distinction between reality and research of reality.

The idea of supervenience is concerned with the order and with the ordering of facts. It makes ontological and epistemological commitments. It classifies facts according to certain evolutionary principles in a comprehensive way. 'Supervenience' is a philosophical concept that is applied to the methods and results of science. Francis Crick, although not employing the concept of supervenience, considers the neurobiological account of consciousness as a scientific hypothesis; cf. his work (1994). On his view of the relation between science and philosophy, cf. p. 256 ff of that work. He hopes that "philosophers will learn enough about the brain to suggest ideas about how it works" (p. 258).

Building up classificatory schemata and subsuming various occurrences under them is the first, basic task of scientific research. Carl von Linné accomplished this in the area of botany; cf. especially his work 'Species plantarum' from 1753. He also contributed to the corresponding organizing work in zoology. These studies were complemented by researchers who worked on anatomy, physiology and ecology. A new question was raised in the studies on heredity, and it was Charles Darwin who gave the explanation to this phenomenon by the theory of evolution (cf. his work 'The Origin of Species by Means of Natural Selection', 1859). Finally, the basic factor of life, the genetic code, was unravelled by Francis Crick and James D. Watson in 1953. This discovery revealed the role of nucleic acids in the generation and growth of living beings. It thus identified the physical basis of life.

The classification of living beings, and the account of their development and its core factors, contribute to answering the question "What is the place of life in the scheme of nature?" This is achieved by revealing the physical preconditions of life. Physical basis is a necessary condition for life; accordingly, if it were removed, there would not be life. However, there could be a lifeless physical universe – and there has been, before the evolution of life. Thus, the inorganic nature can be accounted for without recourse to the organic one; but accounting for the latter requires taking the former into consideration. For the organization of scientific research, this means that biology is built on the foundation of physics, but physics not on biology.

A corresponding situation ensues when mental occurrences are added to those of life. Historically speaking, consciousness and self-consciousness have developed gradually, as living beings have become sophisticated enough. Social arrangements have then evolved from mutual relations between conscious beings. Languages, i.e. signal and symbol systems of communication, have developed on this basis.

In the light of supervenience, nature is a layered system that has evolved through aeons and will presumably go on in its development – cultural evolution building itself on the basis of cosmic and biological evolution. We may trace given facts of culture back to their origin in forgone human populations, these back to the first occurrences of life, and these again to physical facts. We may also make projections concerning future: evolution will presumably continue, but how?

As was indicated above, there are occurrences, or facts, or things that supervene on something, and correspondingly there are occurrences, facts, things, on which the former supervene. This implies reduction: the former are "nothing but" the latter, organized in a proper way. A distinction is thus drawn between (i) what it is that does supervene, and (ii) what it is on which the supervening content is supervening. The relation between (i) and (ii) means that the former is reducible to the latter. One may speak of "the content factor" and of "the basis factor". For the purposes of explanation, (i) is considered as *explanandum*, (ii) as *explanans*. Thus, we may explain e.g. heat (something felt) by the acceleration of molecules (something physical).

Moreover, the original basis factor can take the role of a new content factor, etc. The result is a chain of superveniences. For instance, if we start with the fact that *a* is a sentient being, its base is the fact that *a* is a living being (cf. above). Being alive is in turn based on biochemical facts, the latter on chemical facts, and these on physical facts. This is the downward route; if we change direction, contents become bases for further contents, and we proceed upwards.

The structure of reality thus revealed and accounted for is grounded on physical facts. These yield the fixed starting position for explanations, and the final basis for reduction. The systematic order of bases and contents is mirrored by the time order of evolution and emergence: the birth of cosmos, life, consciousness, culture. The system of nature thus has a fixed start position and an open future. It has evolved from the birth of stars and planets; where its development will lead, is a moot question to which various cosmological theories try to answer. These theories have their precedent in the work by Pierre Simon de Laplace, 'Exposition du système du monde' (1796).

The order of facts that their supervenient analysis reveals, may be expected to give a wholesale answer to the question concerning the scheme of reality. In the *Introduction* above, this question was given two formulations. Its answer should give a proper classification of facts, their systematic order, and their time order. Classes of facts are strata of reality. The specific content of such a stratum is the subject matter of its attached branch of research, or branches of research. Thus, for instance, a living cell is studied by biochemistry and biology. A given stratum can be considered as basis for another stratum. The question 'what is the place of life in reality?' receives its full answer in the context of the whole system; the corresponding is true of other strata. An orderly study thus promises to give an all-encompassing account of the evolution of cosmos, life and culture. In respect to what is achieved, one may say that these are the facts, and all of them (cf. Chalmers 1996, p. 86: "*That's all!*").

## 2. Supervenience accounting for moral facts

One may wonder how supervenience can account for moral facts. In a broad sense, these may be understood to comprise all facts that are studied in social sciences and humanities. Traditionally, the title 'moral sciences' is used as the common name for these. Moral sciences are distinguished from natural sciences. They are concerned with mental, social and cultural facts. The objects of their research are human action and its results: history, societies, states, languages, works of art etc.

In the light of supervenience, moral facts depend on social, these on mental, and these on physical facts. Moreover, moral facts can be explained on the basis of other facts, and be reduced to these.

As to morality proper, its emergence, development and character are examined in the theory of morals. One can take the fact '*a* is a moral being' as *explanandum* and look for its explanation among the more basic facts that account for it. To these belong the facts that *a* is a social, a sentient and a living being. Correspondingly, what is called 'common morality' is reducible to social and psychological facts. One can also make comparative studies of different moralities, considered either synchronically (the present cultures) or diachronically (the past and present cultures), and give explanations to their common and diverging features.

## 3. Accepted norms and values vs. acceptable norms and values

Morality has an outside and an inside dimension. The outside dimension is concerned with facts, such as something being done by a person or by citizens in general, or something being accepted as proper behaviour in a community. Morality in this sense comprises factual practices and factually accepted practices. These may deviate from each other; cf. the so-called "double standard morality".

The inside dimension, in contrast, gives reasons for the following questions: is that what is done *right*? Are the principles which are generally followed *right*? These questions concern the issue of morally acceptable standards.

Although the dimensions are clearly distinguishable, it is in practice difficult to keep them apart. Thus, the very

word 'norm' can be thought to express something generally accepted; or it may be understood in the sense of a self-addressed unconditional duty. One may compare this to G. H. von Wright's distinction between the *descriptive* "discourse for speaking about norms" and the *prescriptive* "discourse for enunciating rules of action and other norms" ((1968), p. 11).

There is also a second, related difficulty that is concerned with attempts to defend one's behaviour by appealing to what is generally done, or generally accepted. That such a procedure is quite common, is a fact of moral psychology. But is it justifiable – and if not, why not? This question can be clarified in the light of David Hume's short remark in his work *Treatise of Human Nature* (third volume, first part, first section). He distinguishes between the expressions 'is' and 'ought'. On the basis of this, he makes two claims: (1) because the latter "expresses some new relation or affirmation...it should be observ'd and explain'd", (2) "a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it." (Hume (1992), p. 246).

The following conclusions can be drawn from Hume's analysis: If consent is given to claim (1), then reducing 'ought' to 'is' would mean the mistake of conflating norms with facts. If consent is given to claim (2), but the required "deduction" cannot be given, then an 'ought', in case that it is not self-evident, can be justified only by appeal to some other, more basic 'ought', but never by appeal to facts. In the light of this, acceptable norms cannot be derived from accepted norms. Moreover, there are reasons to suppose that acceptable norms form an autonomous area, for which one cannot account by any facts whatsoever.

The expression 'ought', or 'should', can be prefixed to the verbs 'be' and 'do'. Then, 'should be' may be understood to be the core of value judgements, and 'should do' the core of judgments expressing a norm. (Cf. the traditional German distinction between *Seinsollen* and *Tunsollen*). These judgments are concerned with values and norms as abstract entities (cf. the concept of number, to which values and norms are in this respect analogous). The theory of values is known as *axiology*, and the theory of norms as *deontology*.

Values as abstract entities are to be distinguished from valuations, the latter being concrete actions or mental dispositions. Correspondingly, norms differ from commands. Values and norms thus understood are nothing mystical but plain common sense: although their explication is difficult, we know quite well how and when to employ them in discourse and how to apply them to action. We then act as moral subjects *inside* the realm of morality, using normative concepts in the prescriptive sense, whether addressing them to ourselves or to others. We participate to moral discourse; we do not try to explain it or reduce it to facts.

We can step *out* and thereby switch off to descriptive, fact-stating mode of moral discourse. Speaking from this vantage point of accepted values and norms, enables us to account for them by appealing to facts of culture, society, psychology etc.

Accordingly, it is the factual side of normative utterances, i.e. valuations and commands, that can be accounted for by supervenience. Supervenience does not concern values and norms in the prescriptive sense. Acceptability is not reducible to acceptance.

Ludwig Wittgenstein made a related point in proposition 6.41 of his *Tractatus*: "In the world everything is as it is, and everything happens as it does happen: *in* it no value exists – and if it did exist, it would have no value. If there is any value that does have value, it must lie outside the whole sphere of what happens and is the case."

In 6.43 he says: "If the good or bad exercise of the will does alter the world, it can alter only the limits of the world, not the facts...". This can be interpreted in the following way: as seen from the perspective of values, the world – the totality of facts – appears in a different way than through neutral, non-committed consideration.

#### 4. Critical remarks

It is difficult to put in words the dual dimension of value and norm expressions: firstly, valuations and obligations as accepted, empirical, factual – secondly, values and norms as acceptable, conceptual, normative. Wittgenstein even thought that the latter dimension exceeds the limits of language; cf. *Tractatus* 6.421, according to which "ethics cannot be put into words", and 6.423: "It is impossible to speak about the will in so far as it is the subject of ethical attributes."

Also, maintaining the duality in a consistent way is difficult. This is exemplified by certain occasionally encountered suspicious expressions, such as "value facts". If one wants to refer by it to valuations, one should then rather speak of facts of valuation; if it is intended in the normative sense, it marks a plain confusion. That, for instance, the life of a species in nature is intrinsically good, is not a fact but a value. The fallacy of *metabasis eis allo genos* can be committed in attribution of properties and in reasoning. As to the latter possibility, Hume speaks of an "imperceptible change" from propositions containing the copula 'is' to those "connected with an ought"; cf. Hume (1992), p. 245 f.

Let us put forward some reminders: values are not facts; valuations are facts. Norms are not facts; making normative claims is a fact. There is nothing wrong in the effort of upholding the fact/value distinction, or the factual/normative one. (There is neither anything morally wrong in this, nor anything logically wrong).

Maintaining these dichotomies implies that supervenience does not apply to values and norms themselves, but it does comprise moral facts (cf. Sec. 2 above). This is not a loss, because the idea of supervenience means explaining facts through reducing them to other, more basic facts.

## Literature

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