



Grupo de Astrofísica Relativista  
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# Scientific Philosophy



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# Ethics



Values  
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All animals evaluate some things and some processes. Some of them learn the **social behaviour patterns** we call 'moral principles', and even act according to them at least some of the time. An animal incapable of evaluating anything would be very short-lived; and a social animal that does not observe the accepted social behaviour patterns might be punished.

These are facts about values, morals, and behaviour patterns. They are the starting point of **ethics: the philosophy of moral behaviour.**

All normal animals strive to attain or retain a ***state of well-being*** - which, however, is not the same for all. Consequently normal animals value positively, i.e. they find good, anything they need for their well-being and, in the first place, for their survival.

I postulate that ***needs and wants -biological, psychological or social - are the very roots of values***. The function of ***norms*** is to protect behaviour based upon such values, i.e. to facilitate the realisation or fulfilment of the desires and wants that motivates the act of valuation. I also postulate that we are driven by our values and constrained by our norms, not only by external factors.

Not all values are on the same footing. There are ***primary***, ***secondary***, and even ***higher order values***, according to the level of needs or wants they originate in.

Correspondingly there are basic ***rights*** and ***duties***, namely those associated with basic values. Similarly, there are higher order - i.e. less important - rights and duties, i.e. those that correspond to higher order values.

# Values

In the real world **there are no values in themselves**, anymore than there are shapes, motions, or mathematical functions in themselves. Instead, **there are organisms that evaluate certain things** (among them themselves) when they, as well as the things valued, are in certain states or undergo certain changes. In other words, **whatever is valuable is so for some organisms in certain states**, particularly states of deprivation that originate drives which motivate action.

Values are not things, states of things, or processes in things: these can only be ***value-bearers*** or objects of valuation. ***Values are fictions attributed to objects of certain kinds by organisms of certain types and in certain states.***

**Definition:** An item ***a*** is valuable in respect ***b*** for organism ***c*** with goal ***e***, in circumstance ***d***, and in the light of the body of knowledge ***f*** iff it satisfies a need of ***c***.

In short, value judgments involve at least binary relations: they have the form  $Vab$ ,  $Vabc$ , ... ,  $Vabcd$  ...  $n$ . If we succeed in quantitating values, the relation becomes a function from  $n$ -tuples of objects to numbers. Example:  $V(a, b, c, d, u, t) = v$ , where  $u$  is a suitable unit, and  $v$  the numerical value  $c$  attributes to  $a$  in respect  $b$  and stance  $d$  at time  $t$ .

The general form of a **numerical value function** is

$$V: A \times B \times \dots \times N \times U \times T \rightarrow R,$$

where  $A$  is a collection of **value bearers**,  $B$  a collection of organisms, and the remaining factors in the cartesian product, up to  $N$  may be collections of things, properties, states, or processes, whereas  $U$  is a set of units,  $T$  a time interval, and  $R$  is the set of real numbers. Quantifiable values are exceptional.

I distinguish ***two levels or degrees of need***: primary and secondary, and shall define the corresponding concepts in terms of that of deficit or deficiency, i.e. whatever is lacking to achieve optimal survivorship:

***Definition***: Let  $x$  be a biological, psychological or social deficit of a being  $b$  in circumstance  $c$ . We call  $x$

- (i) a ***primary need*** of  $b$  in  $c$  iff meeting  $x$  is necessary for  $b$  to stay alive under  $c$ ;
- (ii) a ***secondary need*** of  $b$  under  $c$  iff meeting  $x$  is necessary for  $b$  to keep or regain health under  $c$ ;
- (iii) a ***basic need*** iff  $x$  is a primary or a secondary need.

**Definition:** Let  $x$  be a thing, a property of a thing, or a process in a thing. We attribute  $x$

- (i) a **primary value** for human beings in circumstance  $c = \text{def } x$  contributes to satisfying at least one primary need of any humans, in any society, when in circumstance  $c$ ;
- (ii) a **secondary value** for human beings in circumstance  $c = \text{def } x$  contributes to meeting at least one of the secondary needs of humans under  $c$  in their particular society;
- (iii) a **tertiary value** for human beings in circumstance  $c = \text{def } x$  contributes to meeting at least one of the legitimate wants (or desires or aspirations) of humans in circumstance  $c$ ;
- (iv) a **quaternary value** for human beings in circumstance  $c = \text{def } x$  contributes to meeting a fancy;
- (v) a **basic value** =  $\text{def } x$  has either a primary or a secondary value.

**Definition:** An object  $x$  is **good** for a human being  $b$  in circumstance  $c$  =def  $x$  has a primary, secondary, tertiary, or quaternary value for  $b$ .

**Definition:** An object  $x$  is **bad** for a human being  $b$  in circumstance  $c$  =def  $x$  avoids the realisation of primary, secondary, tertiary, or quaternary values for  $b$ .

However, *tertiary and quaternary values are not universal, whence something good for someone (for realising a ternary or quaternary values) may be bad for someone else.*

Nothing is good in itself, i.e. regardless of any evaluating subjects and in all circumstances. For example, there was nothing good or bad in the universe before the first animals emerged.

No needs —> no values —> no good or bad.

According to the needs that motivate valuations, we can differentiate between bio-values (basic) and psycho-values (meres desires).

Discrepancy between bio-values and psycho-values can be a source of internal conflict for the individual that evaluates.

Notice that, for instance, food is not a value. It is an item that we value, i.e. **valuation is a mental operation by which we attribute value to needed or desired items.**

**The value in itself is a fiction**, like truth. We can value extremely harmful things, such as drugs or weapons, out of ignorance or conditioning.

***Value judgments*** can be justified or criticised, rather than accepted or rejected dogmatically, when they are rooted to basic needs or legitimate wants. In this case they can be shown to be true or false. Thus consider the following propositions.

- (i) Freedom is good for allowing us to exercise our rights.
- (ii) Honesty is good for promoting cooperation.

These statements can be justified or criticised in the context of social science.

**Axiology** is the theory of values and valuations

The axiology I have proposed is **materialistic** since considers conscious valuation as a brain process partially conditioned by social circumstances as well as inner biological and psychological needs.

Then, in this axiology the statement 'V is valuable' should be translated into 'there is at least one individual for which objects with the property V meet some needs or wants'.

The more we know, the better we value.

Human social behaviour requires some **rules or norms** that are called **morals**. The goal of morals is to help realise (or inhibit) the adherence to some human values. Morals, then, are dependent on what is valuable in a society for the individuals living in it.

When a rule is written and enforced by an authority is called a legal duty. If it is of free acceptance, it is a moral. What is not a legal duty is a legal right. **A moral right is the right to meet a basic need.**

Everyone living in a society has some duties and some rights.

An action is said ***morally wrong*** if it hinders some individual to achieve a moral right. Conversely, it is ***morally right*** (or correct), if it helps some individual to exercise a moral right.

A person *a* is ***morally responsible*** for an action ***b*** or for the consequences of not acting in some circumstance iff knows right from wrong, is fully conscious of the intentions that triggered the action (or blocked it), and ***a*** is not under external compulsion.

We are morally responsible not only for our intentional or deliberate actions but also for ***faults of omission***, such as negligence or failure to act at the right moment. Whoever is in charge or control of an event the outcome of which is beneficial or harmful to others, is responsible for that event or for the failure to trigger it.

Only individuals can be morally responsible, for the simple reason that only individuals can have a conscience.

To put it negatively: there is no such thing as collective moral responsibility.

All there can be is the sharing among all the members of a group in a given responsibility. Therefore, **collective reprisals are moral monstrosities**.

It is mistaken to shift responsibility from the individual to society ("the system", "the establishment").

A ***moral code*** is an ordered system of norms specifying what is right and what is wrong for some individuals in a given society. While some such norms regulate interpersonal activities, others guide the behaviour of individuals. Every moral code is supplemented with meta-moral (or ethical) norms stating that such and such norms are superior to such and such other norms.

A rationally and empirically tested moral code will be superior to one that is irrational, based on superstition, and imposed by propaganda. A scientifically-oriented morality takes into account the findings of science in order to propose moral codes designed for specific societies where individuals have specific needs and wants. **As society evolves, so moral codes should evolve.**

# Ethics

***Ethics*** is meta-moral, i.e. the study and design of morals to satisfy the needs and wants of individuals of some society.

***Ethical theories are hypothetic-deductive systems about the nature, roots, and functions of moral norms.*** Such theories should be evaluated in the light of science: internal consistency and experience.

In addition to a scientific ethics, we have the ***ethics of scientific research***. This ethics fixes the moral rules of science. Any adequate definition of the concept of science must include a reference to its moral code, which is designed to ***encourage and protect the search for truth***, i.e. the pursuit of adequate (though not necessarily iconic) models of reality.

# Action

Actions can be ***intentional*** or ***unintentional***. Intentional actions are motivated by a goal, and executed by some means. The *means are as important as the goal*. Not all means are equal. A moral action should adopt means that minimise the morally wrong impact on any sensible individual. This can be achieved with adequate scientific planning. *Impulsive actions often are extremely harmful*. They should be avoided in a civilised society.

Since there may be alternative means for attaining a given goal, we ought to choose the means optimising the total value  $V(i, m, f)$ , rather than just the difference between the values of the initial and final states. Notice that **optimisation is not the same as maximisation**. In many cases optima lie between minima and maxima.

**Summing up:** All organisms with needs value some items. **Values** are fictions attributed to those items. There are basic values or **bio-values**, and non-basic values or **psychological values**. **Morals** are norms imposed in a society to enforce values that are considered desirables (goods). **Good** and **wrong** do not exist by themselves. They are the result of our valuations. **Ethics** is meta-moral theory: the study, justification and design of morals. **Action** should be regulated by ethics within a society. Ethics, in a rational society, should be scientifically conducted to lead to the optimal rules of behaviours, and hence, to establish what is good and wrong in the context of that society.

# Scientism

Scientism is a worldview, i.e. a system of opinions about the world, based on and compatible with the scientific knowledge. Scientism maintains that the scientific method should be reapplied to solve the manifold problems of human life.



**Thanks!!!**