

UNIT FIVE: THE NORMATIVE AND THE EMPIRICAL

Introduction

In this unit we will reflect upon: Five distinct meanings of the term ‘law’ and its cognates (universal hypothesis, rule, axiom, a priori knowledge, necessary truth, apodictic certainty).

This will prepare us to understand later, in Units 6-10, a broad contrast between two (interdependent) types of reasoning that are typically invoked to support general claims of two kinds: normative principles—which indicate how things must be or how they should be—vs. empirical generalisations—which supposedly report how things are in fact.

But many statements in the human sciences and social studies contain implicit and explicit meanings: many statements convey both a factual judgment as well as a value judgment.

It is extremely important in a course on critical thinking to become sensitized to this feature of the disciplines in the social studies where you are dependent upon textbooks that are produced in a distant culture and when you are learning theories and research assumptions that are developed in the international language of a former coloniser’s knowledge tradition. As we observed in Unit 4, this feature of certain disciplines to reflect the values and norms of imperialist or globalising societies, when they are explaining social norms of people in currently or formerly colonised societies can be misleading. The same problem does not arise to the same degree in the physical sciences. In this Unit as in the last, we will continue to examine why.

This unit will cover the following topics:

- Section 1 Six senses of ‘law’.
- Section 2 Contrasting facts and values
- Section 3 Explicit and implicit meanings of statements

Objectives

Upon completion of this unit you should be able to

- Identify different notions of law presupposed in statements □ Distinguish statements that express facts vs. values
- Recognise the implicit and explicit meanings of statements

Section 1 Six Senses of ‘Law’ Introduction

These contrasts were introduced already when we discussed ambiguity and equivocation. To avoid being fooled by switching connotations without indication, the differences should be clear to you as a critical thinker.

Objectives

We will contrast the notions of

Natural law, Civil law or statutory law, Customary law, vs. cultural norm, social rule, convention, moral law, logical law, mathematical law, divine law.

NATURAL LAW

Where this is understood to be statements expressing the laws that scientists are striving to discover, the statement expressing a law of nature is called a scientific law. These are statements that aim to describe; regularities or uniformities in the patterns of event or features of things we observe around us. The statement expresses an expectation that we have which is based on past experience: it is supposed that the statement will meet with no exceptions. It is in this sense that the statement is supposed to be law-like. But there is no way to be absolutely certain that the statement is true. So it is called law-like, in case it turned out someday to be false. For example:

(1) Every planet moves around the sun in an elliptical orbit.

Suppose that we someday did discover a planet that did not orbit the sun in the path of an ellipse. Then we would not propose that the planet be incarcerated or accused of a wrong motion. We would be obliged to check our data, review our observations. If it turned out that indeed the planet newly discovered was not really some other kind of celestial body but really was a planet that did not have an elliptical orbit, then we would have to say (1) is false.

In this respect, statements depicting scientific laws are predictions in disguise that may turn out to be false someday.

Example: Consider this ‘low-level’ law like statement: All metals expand when heated. This is a disguised prediction in the sense that it means: If this object is a metal and if it is heated then it will expand.

It may not be obvious why this statement is recognised as true even though some day it might turn out to be false, and we know that even now, yet we still accept it as very probably true. We will discuss why law-like hypotheses like this one in the example come from later and at length in Unit 7.

Scientific laws always depend upon evidence; they are predictions based on summary reports. They may turn out to be false. We call such statements ‘law-like’; the statement *might* recount a law of nature that exists, or it might not. With our limited experience we have no way of telling for sure.

Examples of statements that are necessarily true because they are theoretical definitions (recall Unit 2):

(2) A molecule of water is H_2O .

(3) A force operating upon a moving object is equal to its mass times its acceleration.

(4) The atomic weight of gold is 12.

Activity 1.1

Recognising the close connection between necessary truths and definitions.

For each of the statements (2) - (4) above, explain why each can be regarded as a law of nature, but also a definition.

CIVIL LAW AND STATUTORY LAW

This type of law is man-made; it reflects the legal instruments that governments have to control behaviour of citizens. These laws have been intentionally created through due process in accordance with the procedures set up for creating legislation. These laws are backed by force and they have sanctions attached. Constitutional laws are obligatory on the government to obey. Examples of manmade laws include commercial law, tax laws, tort, contract law, constitutional statutes, land tenure regulations, family law, labour laws, rules for electoral process, media laws, laws for starting a business, licensing a building for commercial use, criminal laws in response to stealing, murder, manslaughter, assault and battery, human rights laws, laws protecting the rights of prisoners, arrest and detention procedures, laws protecting against perjury, libel, intestate law, traffic laws, procedures for certification to register certain property or to engage in certain services for commercial purposes.

If a citizen breaks these laws, and is caught and summoned to court to determine their guilt in violation of the law, then there may be penalties. A citizen may choose to break such a law, or do so unwittingly, but the consequence of violating a law in this sense does not invalidate the law. Rather the violation may entail inconvenience or loss of freedom through imprisonment or capital punishment leading to loss of life. The threat of punishment in principle provokes people to obey laws that are man-made.

There is an important contrast between the idea of natural laws first described above, and the idea of criminal and civil laws that are man-made. It would be a confusion to say that the laws of psychology force a person to act in a certain way, or that the laws of planetary motion *compel* planets to move a certain way, on pain of punishment if they violate the law. If we learn about a planet that does not follow (1), then we reject (1) as false. We don't punish or deride the planet. Similarly for so-called psychological laws. Human behaviour is extremely complex and multidetermined, and for whatever reason it is difficult for psychologists to discover statements about human individuals that have no exceptions whatsoever unless they are; very banal truisms,

like 'All people deprived of liquid to drink for over twelve hours seek to quench their thirst.' Even this sentence is likely to be false if we took hard enough into places where fasting recluses are seeking spiritual development and are totally immune to the demands of even their own bodily need to replenish fluids, or someone who is determined to make a point and is on a hunger strike.

CUSTOMARY LAW

In some countries two parallel legal systems or more are sustained simultaneously. But the manmade nature customary law, are closest to civil law. Indeed customary law is civil law, and is practiced despite the impression that customary laws may have been superseded by another subsequent system that is enforced by a central state apparatus. Violations of customary laws are thus sanctioned in accord with the system of authority that is organised to sustain them.

CULTURAL NORM, SOCIAL RULE, CONTENTION

These contrast with laws, in that these norms influence people's behavior usually without any formal public or community arrangements or procedures which follow their violation. To break these types of code of conduct will likely have a more diffused negative consequence; unacceptable behavior often attracts covert approval within sub-groups of society (there is always a clique for eccentrics and rebels to seek support and recognition). Very possibly breaking social rules will yield no public response or effect at all. So it is not always that you will find the purported disincentives to breaking social rules and conventions. In this respect, social customs and mores fall short of being binding in the way laws are understood to carry specified sanctions. Examples of cultural norms and conventions include wearing of certain kinds of apparel in certain public and private circumstances, dietary rules, worship behaviour, observance of holy days and public ceremonies, and a host of other rules guiding conduct and relationship that are detailed lovingly by sociologists and anthropologists.

Another kind of code of conduct is specific to situations: for instance there are codes of conduct for playing football, or for attending university. Each institution can create codes and procedures that are followed if a member violates the procedure.

MORAL LAW

The authority of morality is usually presumed to be universal. If stealing is wrong morally, then that means it is wrong whoever you are, wherever you come from, whatever your religious beliefs or social customs. So moral principles are called 'laws' in that they bear no exceptions; otherwise it is not laws that constitutes the difference between moral law and cultural norm except that there must be a difference, otherwise there would be no way to complain and debate on moral grounds on whether a cultural norm is ethically right, e.g. serial divorce, or extra marital sexual relations. Morals are certainly understood to be more binding than conventions, but there is obviously variation in views worldwide about what is moral behaviour so exactly what moral universality amounts to is not at all obvious. Moral imperatives (for instance: do not steal) are readily distinguished from what is legally prohibited, or behaviour required by legislation (for instance civil disobedient Black South Africans intentionally broke pass laws in apartheid South Africa prior to 1994 and were thereby acting with great moral courage and rectitude. Nelson Mandela's

activities landed him in Polmoor Prison for thirty years because he was violating legal statutes but in doing so he was acting as a moral hero).

There must be some contrast between moral law and criminal law, or between moral law and cultural norm, however difficult it is to articulate, otherwise it would be impossible to complain about the injustice or immorality of some cultural conventions and norms, and there would be no sense to regarding Nelson Mandela a hero during the fight against apartheid because he broke the pass laws of South Africa. In other words if saying an action is morally good means exactly the same thing as saying that the action is recognised as a cultural norm, then there would be no way to criticize any cultural norm as being immoral.

People do challenge the morality of legislation and of cultural practices all the time and they are not contradicting themselves. For instance some people criticize as immoral, and other people defend as morally innocent, the cultural norm of women being paid to waitress or to dance while wearing practically no clothes in a public drinking venue; other people will defend this practice as morally innocent and acceptable on cultural grounds. That debate could not make any sense if there were no difference in our understanding between moral principle and cultural norm. Another example is where people within one culture object to the social toleration that exists for serial marriages or serial divorce (that is, getting married to one woman, getting divorced from her and remarrying another) because they regard such behaviour as unethical. Again this complaint could not arise, that is the challenge would be incoherent if there were no distinction between the sense in which we understand something to be a cultural norm and the sense we intend when we say that something breaks a moral code or moral law. It's important to remember this when the topic comes to moral relativism.

Similarly, if being calling an action legal meant the same as saying that the action is morally commendable, then there would have been no way to challenge apartheid law on moral grounds prior to 1994 whilst it was the official system of legislation in South Africa. Correlatively, there would be no way to *break* apartheid law on moral grounds, if obeying a civil law means the same thing as obeying a moral law. And yet as we observed above, there are many famous examples of people doing exactly this: breaking a law on moral grounds, and being punished by the state for doing so, and so being regarded as heroic on ethical grounds because of it.

Since it is plain to everyone that the thirty years Mandela spent for breaking apartheid laws and for advocating armed rebellion against the legislation of apartheid in South Africa was an outstanding example of moral rectitude and heroism, everyone clearly recognises two different connotations of law when they speak of moral law and of civil law, even though spelling out exactly what constitutes moral authority is extremely difficult. So we speak of two connotations of law when we regard moral law and civil legislation.

We might also consider a different situation, to understand that indeed there is a stark contrast between moral Tightness and legality. Many people object on moral grounds to the trial and incarceration of the esteemed Tsatsu Tsikata, former chief executive of Ghana National Petroleum Company. Legally the rules and statutes for due process of putting someone on trial and incarceration may have been followed, but the motivation and causal factors leading to these legal proceedings have been challenged in that some think a moral injustice was committed by setting in motion the whole legal process from the beginning. Now, whether you agree Tsatsu was properly

incarcerated or not, the point here is to recognise that the debate and your own view about whether the Tsikata's case and the judge's decision were moral cannot be formulated if you do not distinguish between man-made legislation and the sense in which people pass judgments upon the moral Tightness and wrongness of actions. But clearly there is such a debate. And clearly you may or may not hold a view about it. So we do indeed recognise a contrast between, what is legal and what is morally right and commendable.

Activity 1.2—Thinking exercise

Recognising the contrast between the sense of law connoted by state legislation vs. moral laws.

Think of an example where someone is criticizing on moral grounds the legitimacy or justness of a civil statute or a law. Then write a sentence to describe the conflict between something that is an accepted practice on legal grounds but is regarded as unacceptable on moral grounds. Explain in your own words how this example illustrates that there must be more than one sense we attribute to the notion of law.

Activity 1.3—Research exercise

Contrasting moral law and cultural custom or norm

Find a cultural norm or social custom either in your own society or someone else's which you find morally objectionable. Write your value judgment in one statement.

Write down whether your judgment supports or instead contradicts this relativist view of morality: what is morally right and morally wrong is nothing more than a construction of each society, so that morality is relative to each culture or society.

LOGICAL LAW

These principles have no content or subject matter. They are rules for thinking that are required in order to move from statements that are accepted as true, to further statements which by all means will necessarily also be true since they follow from, that is they deliver in a different way the same information as, the premises that were assumed to be true from the outset.

The relation in a valid argument between premises and conclusion holds only because logical laws have governed the inference, regardless of the subject matter. In this respect, the laws of logic are universal.

Example: If all As are Bs and every B is a C then every A is a C.

Deductive laws of logic guarantee that if your starting point (your assumptions or premises) are true then your final conclusion that will also be true. If we follow the laws then we will never be led from a true assumption to a false conclusion, in this respect a rule of logic has no exceptions: it is foolproof, no matter what the subject matter. Why this is so will become clearer in Unit 6.

But in the formation of arguments every day by human beings, mistakes are often made; the laws of logic are not always applied, just as traffic laws are routinely disobeyed. It should be emphasised

that logical laws are not *empirical*. Laws of logic are not empirical summaries of how people do think. They are not psychological overviews: these laws are not a record of psychological regularities. Deductive laws of logic are normative: they capture how we should think, not how we actually do think. Rules of logic are not always followed faithfully by living human beings. People commit logical fallacies. How people actually reason about a problem or a decision about what to do is flawed; we violate these logical laws.

Although people make mistakes in their reasoning and fail to follow rules of logic, this is not a refutation of the laws of logic. Even if in certain situations people deviate very often, or if certain cultural frameworks encourage people to disregard laws of logic, this also does not refute the laws. The force of these rules is not relative to culture.

Ultimately the laws of logic are derived from the fact that reasoning productively is impossible without them. And you cannot prove that this is so, without employing some rules of logic. But that is a weak explanation of the authority of logical laws, because it assumes that we can sit back and judge when reasoning is productive or not. This would require some goal or purpose of reasoning, and some content or subject matter about which the reasoning is performed; only then can we decide if the reasoning is fruitful or not. Yet the laws of logic are supposed to be binding independent of all subject matter. We will explore further the significance of laws of logic in Unit 6.

Activity 1.4—Discussion option

Showing logical laws are not empirical laws.

Come up with an example of a mistake in reasoning that violates this logical law:

(5) All As are Bs, and this x is an A. So this x is a B.

Does your example invalidate this law?

Example: Let A = Dogs, B = creatures that bark

All dogs bark. This creature is not dog, so it cannot be bark.

Commentary: This person is confusing modus ponens, since there are creatures that bark who are not dogs; seals bark, for example. But the rule would stay the same nonetheless, since All As are Bs does not mean all Bs are also As. And suppose you have a case where there is a dog that doesn't bark. My dog lost his voice in a car accident. He cannot bark. Still if it were true that all dogs bark then the conclusion would follow, so the rule is not violated in either of these apparent counter-instances. One contrary case is due to confusing modus ponens reasoning and committing a fallacy, the other is due to the premise being false about all dogs. Neither case means the law is no longer valid.

MATHEMATICAL LAW

We can separate these into rules for mathematical practice:

(6) Never divide by zero.

And descriptive laws that summarise the results of mathematical practice for all time:

(7) Every even number is the sum of two primes.

If the Laws in mathematics are established as the conclusion or theorem derived as the last line of a proof. We will give an example of a proof for (6) above in the last section of Unit 6.

A proof is a list of statements that is constructed by using rules of logic to move from one or more statements in the list to construct subsequent statements in the list. Therefore one might assume, as mathematicians and philosophers have supposed for hundreds of years that the certainty of mathematical laws depend ultimately upon laws of logic.

But this assumption turns out to be mistaken. Because in any symbolic language that can exhibit all arithmetic truths, it will always be possible to find a true statement which cannot be proven, nor will its denial be proven false.

So it is not clear what justifies in an ultimate sense our certainty about mathematical laws. But we can recognise that their status as an exception-less law follows from our constructing a proof for it. The difference between proving a statement as a theorem from first principles and confirming a statement as a law-like hypothesis on the basis of evidence is the topic of the next Unit 6.

DIVINE LAW

This is a theological concept. The content of such laws depends upon which doctrine is embraced for first principles.

For instance, at different times and in different religious and cultural conditions, the following manifestos and beliefs have been claimed to derive as divine law:

- God's will was supposed to justify the laws of segregation prior to the 1950s in USA
- Legal sanctions against miscegenation and all forms of racial segregation in the USA's public and private institutions are still regarded in some communities as directed by divine law
- Apartheid laws in South Africa prior to 1994
- Discrimination against homosexuals is regarded as ordained by divine law
- Laws against abortion and against contraceptives regarded as ordained by God
- Divine rule of kings justified the monarchies in Europe until the 18th century French revolution challenged this doctrine
- Rule of the Vatican in Rome dominated Europe up to the 15th century by appeal to a Divine Order

- Activities of the Ku Klux Klan in the USA are always ratified by the conviction that white supremacy is ordained by God's law

It should be clear from the list above that there is no way to judge amongst all the mandates that have been claimed to be divine will and therefore carries the authority of a supreme law. If there is a supreme law whose author is a divine will, its content is completely open to speculation. For all we know, divine law decrees that we all must wear red hats on Wednesdays; and this edict has yet to be discovered by some prophet who will in future realise the true message of the First Cause through a revelatory dream.

Different interpretations of various Scriptures prevail. The meaning of any written text including sacred scripture depends upon the time and context of the authorities reading it. So even if there is such a thing as divine law the content of its directives cannot be established through reasoning. There is no way to establish indubitably that one interpretation of the Bible or the Qu'ran is more revealing of divine will than another.

Activity 1.5

Identifying two different types of normative statements: Law-like hypotheses vs. theoretical definitions

- a) Which of the following are true because they express a uniformity or regularity of nature which is established by observing the empirical world. This is an empirical or *factual* generalisation, or a law-like empirical hypothesis. Its truth would be confirmed through experimentation or field work research.
- b) Which of the following are true because of the meaning of the words comprising the sentence? This is called a theoretical definition. Its truth could be determined by consulting a dictionary or lexicon.
- c) Which of the following could count as both a definition and a law-like empirical hypothesis?
 1. NaCl is water soluble.
 2. 'NaCl' is the chemical abbreviation meaning sodium chloride, commonly known as table salt.
 3. A single Y chromosome is a rod-like or thread-like structure occurring in pairs in the nucleus of animal and plant cells, carrying genes which determine the inherited characteristics of an individual.
 4. Every metal expands when heated.
 5. It is necessary but not sufficient to have an x-ray taken to determine if a tumour is malignant.
 6. No human being is borne with feathers.

7. A substance is water soluble if it dissolves in an unsaturated solution of H₂O at room temperature and normal barometric pressure.
8. The substance in this beaker is water soluble.
9. Exposure to light is a necessary but not a sufficient condition for most green plants to grow.
10. Fufu is a dumpling made from boiled and pounded tubers, including cassava and usually plantain or cocoyam.
11. A homo sapien is a featherless biped with the most developed neo-cortex among the family of mammals.
12. A whale is a mammal.
13. Every mammal needs water to live.
14. A mammal is a class of animal having a milk-secreting organ in the female for nourishment of the young, and usually is quadruped with hair or a fur coat.
15. A biological sister is a female sibling.
16. The green colour in a plant is due to the chemical called chlorophyll in its cells which makes photosynthesis possible, the compound necessary to transform light into energy for the plant to grow.
17. A floating currency is a currency that uses a flexible exchange rate as its exchange rate regime, and is contrasted with a fixed currency.
18. A newton is a unit of force, acting for one second on a mass of one kilogram, giving a velocity of one meter per second.
19. The most famous Newton died in 1727, and was born the year that Galileo died, 1642.
20. Any substance contaminated with DDT has to be treated as a lethal poison.
21. DDT is the most toxic pesticide used in recent years in this part of the West Africa.
22. DDT is a white chlorinated hydrocarbon used as insecticide
(abbreviating
dichlorodiphenyltrichloroethane)

Summary of this section

We have examined distinct senses (connotations) of the word law. We have distinguished the sort of necessity connoted by scientific laws as dependent upon the way the world appears to be. So it is possible to discover that what we took to be a law-like hypothesis that described a regularity of nature after all does not have a universal validity—because one day we find counterexamples that

defy the statement. Then we don't say that the things we've discovered should be punished because they broke the natural law.

Rather we say that what we took to be a law-like hypothesis is actually false, because it doesn't describe a uniformity of nature after all. Either we revise the statement in light of the new evidence or we reject it. That is the way statements that describe scientific or natural laws work. They are very different from every other sense of law that we explored.

Divine laws are also unique in that they are not universally valid, only for those who subscribe to the doctrine or creed from which they originate.

Mathematical laws are recognised as absolute because they can be proven; so their strength is dependent upon the proof theory that supports these logical demonstrations.

Logical laws are accepted as rules, without which we cannot distinguish being right from being wrong, being true from being false.

Moral laws are meant to carry a universality that transcends or supersedes civil laws and theological laws. But it is controversial how to justify moral laws.

Civil laws are man-made and can be changed: violators might be punished if they are caught, put on trial and found guilty. This does not follow as a consequence of other kinds of law.

SECTION 2: CONTRASTING FACTS AND VALUES INTRODUCTION

In this section we consider and practice in more detail a contrast that was introduced in Unit 1: the difference between statements expressing factual judgments and those expressing value judgments.

Recall this difference that we drew in the previous Unit: Statements that describe the world as it is in fact are called factual statements. These can often be distinguished readily from value judgments, which are statements that describe the world as it ought to be or ought not to be.

But in many cases, we state what we think to be the case and implicitly what we say reflects what we believe should be the case.

Objective

- To be able to distinguish a statement which describes a fact that can be tested with an experiment, survey or field work.
- Statements that describe the world as it is in fact can often be distinguished readily from statements that describe the world as it ought to be or ought not to be.

Example of a factual statement:

1. Those boys in that yard are setting fire to that cat.

Example of a value judgment

2. It is wrong of those boys to set fire to that cat.

The two examples above provide a clear cut contrast between factual statement and value judgment: sentence (1) is clearly a report of an episode of behaviour. A photo snapshot could verify the fact conveyed by the statement. But sentence (2) does more than records an event using words as neutrally as a photograph takes a picture. (2) describes what is going on by evaluating it, in this by condemning the action as wrong.

But in many cases, we state explicitly what we think to be the case and implicitly what we say reflects what we believe should be the case. Such statements convey both a fact and a value judgment; this is not a contradiction nor is it a confusion. We say such a statement has an implicit meaning and an explicit meaning. The explicit or overt claim might be factual, while the implicit or covert significance of the statement might be a value judgment.

Example of a statement explicitly factual and implicitly a value judgment

3. “Without IMF policies imposed on the Ghanaian population, Sahel girls would never learn to read.”

Statement (3) above is a quote from the World Bank President for Africa, Jay Wilcox, and was published in the Washington DC magazine *African Farmer* in 1993, in an interview feature article titled “Has Structural Adjustment been a success? Yes.” This statement is explicitly a hypothesis about the influence of recent social and economic history, but it is also an implicit value judgment which conveys that the Structural Adjustment Programme was good thing, essential to progressive educational reform in the country. It also implicitly assumes that Sahel girls should learn to read, and that they would be worse off without the impact of the World Bank.

The contrast between factual and value judgment distinguishes what is testable from what follows deductively from moral principles. In the case of a factual claim, there is some way of investigating the world and its states of affairs in order to tell if it is true or false, whomever you are. We will study the way that factual judgments are tested using inductive reasoning in Unit 7.

A value judgment depends for its certification not only on observations of the world around us, but also upon principles of morality in the case of moral judgments, or on criteria of worth or utility in the case of non-moral judgments.

There are two types of value judgment: moral and non-moral. Non-moral judgments are more objective: these statements can be testable as well. For instance,
Examples of a non-moral value judgement

4. This car provides the best mileage for its price.

This is a value judgment but is not about moral goodness. Best in this sense can be tested by experiment. In contrast, consider

Example of a moral value judgment

5. This is the most virtuous sacrifice the SRC president has ever made.

Here we are looking at a moral judgment, because we are talking about virtue and sacrifice, which are characteristics or personality traits that normally has moral or ethical connotations.

There are many ways of understanding the meaning of moral value judgments. This would involve an analysis of what makes a personality characteristic a moral trait. We will not study these theories of moral goodness and evil in this course. We are only concerned here with recognising when a statement is expressing a value judgment.

Activity 2.1

Distinguishing factual statements from value judgments

Decide which of the labels apply to each item. This exercise provides an opportunity also to identify when an expression is a definition, and when it is not a declarative statement: neither a factual statement nor a value judgment nor a definition.

1. Guinness The Power.

A. Definition

B. Factual statement

C. Value judgment

D. Sentence fragment

2. Anyone who thinks it is acceptable to use stem cells in research must not respect human life as God intended us to love and preserve it.

A. Definition

B. Factual statement

C. Value judgment

D. Sentence fragment

3. Themost vile crime still accepted as a socially desirable practice in some cultures is female genital mutilation. A. Definition

B. Factual statement

C. Value judgment

D. Sentence fragment

4. Every mammal needs water to live.

- A. Definition
- B. Factual statement
- G. Value judgment
- D. Sentence fragment

5. Mammal is the name of the class in the animal taxonomic family of creatures having a milksecreting organ in the female for nourishment of the young, and is usually quadruped with hair or fur covering some or all portions of the skin.

- A. Definition
- B. Factual statement
- C. Value judgment
- D. Sentence fragment

6. Too many people have died in the barrage of aggressive attacks over these endless two weeks.

- A. Definition
- B. Factual statement
- C. Value judgment
- D. Sentence fragment

7. 1.354 people have died in the 40 air strikes over the last twoweeks.

- A. Definition
- B. Factual statement
- C. Value judgment
- D. Sentence fragment

8. "Iraq has turned from a brutal dictatorship and sworn enemy of the United States into the only true Arab democracy in the centre of the Middle East and a friend of America.

- A. Definition
- B. Factual statement

C. Value judgment

D. Sentence fragment

Summary of this section

In this section we have observed the difference between value judgments and factual statements, and realised the tight dependency between universal factual statements (empirical law-like statements) and definitions.

SECTION 3: EXPLICIT AND IMPLICIT MEANING OF STATEMENTS

Objectives

- To recognise the two meanings conveyed simultaneously by some statements
- To appreciate the interdependence between fact and value in the social sciences

Introduction

There exists a failure to comply with the standard dichotomy between knowledge that is recognised as normative and information presented as empirical. This lack of clear demarcation between fact and value results in a peculiar characteristic of the social sciences most notably. Statements explicitly reporting facts about individuals or social groups may implicitly cast value judgments about their subject matter.

Becoming conversant with this contrast between factual statement and value judgment will allow us to become sensitive to the academic reality on the ground, which is that the conventional contrast between what counts as fact and what is regarded as a value is neither fixed nor well-defined in any branch of knowledge.

Some key words that we use to express our values are useful to us precisely because they are *not able* to be well-defined nor can they be defined in terms of strictly observable characteristics: ‘successful’, ‘virtuous’, ‘development’, ‘tradition’ and ‘modernity’, ‘fairness’.

In other words, whether it is appropriate to demand that a term be well-defined or operationally defined depends on the context of the term’s use. And this is not surprising, since *all* meanings of words depend to a greater or lesser extent upon the context in which the word is being used.

Value judgments are an inherent or essential feature of the meaning of these words. They function in this scientific descriptions that are proposed as factual judgments about social reality. And this is how factual statements in the social sciences come to carry value judgments implicitly

Example:

A. Even though the school gave her the opportunity of talking with a counsellor over some weeks, Jasmine has clearly taken the easy way out and chosen to compromise her integrity by going for an abortion by the end of her fourth week of pregnancy.

B. After three weeks of the school's statutory counseling that students are entitled to when they feel the need for it, Jasmine has made a difficult decision and chosen to terminate her pregnancy at the end of the fourth week.

C. After three weeks of the school's statutory counseling that students are entitled to when they feel the need for it, Jasmine has chosen to terminate her pregnancy at the end of the fourthweek.

The statements above A, B, C all report the same incident. But B and C import descriptive words that implicitly cast a value judgment in the course of reporting Jasmine's behaviour: A is a very strong condemnation and makes it clear that the decision made is an immoral one; B casts some modest support for the decision and may imply (in a much milder way than the opposite judgment was conveyed by A) that the decision was morally right; C in contrast is a straightforward factual statement which introduces no value judgment into the meaning of the report.

Activity 2.2—Discussion option

Recognising implicit meaning and distinguishing it from explicit meaning Consider the following five statements. Discuss or reflect upon i-vi below.

- i. Decide which of them is conveying value judgment on the social event being described.
 - ii. Is there any statement in 1 -5 that is purely factual?iii. Are they all factual? iv. Do they all describe the same event?
 - v. How do changes in the words used to describe the social event change the picture and the implications of what happened?
 - vi. How do changes in the words used to describe the event change your impression of the people involved in the event?
1. A young woman purchased a mild sedative on the advice of a pharmacist.
 2. An inexperienced woman was advised by a pharmacist to buy a mild sedative drug.
 3. A pharmacist increased his sales by advising an inexperienced young woman to buy a sedative from him.

4. A rich pharmacist increased his market by persuading an inexperienced young woman on her own that she should spend her hard-earned money on a widely advertised sedative drug which has habit forming risks.
5. A young and attractive woman convinced an older man who was a pharmacist to give her access to habit-forming drugs.

Summary of this section

In this section we have discovered how two contrasting kinds of judgment—factual and value judgments—blend together or synthesize in individual statements whereby one and the same sentence can explicitly or ostensibly report a fact while also implicitly or covertly casting a value judgment.

Assignment 5.1

Directions: Identify which of the following statements are definitions (i.e. refers to a word as its subject), and which are factual (i.e. refers to something outside of language as its subject or reference class).

- a) NaCl increases the symptoms of hypertension.
- b) NaCl is sodium chloride, commonly known as table salt.
- c) A single Y chromosome contributed by the male parent is responsible for the sex of a human offspring.
- d) A chromosome is a rod-like or thread-like structure occurring in pairs in the nucleus of animal and plant cells, carrying genes, which determine the inherited characteristics of an individual.
- e) 'Kpanlogo' is the name of the dance that the people over there are performing.
- f) My sister's name is Ann.
- g) All of Kofi's four sisters are studying medicine.
- h) A sister is a female sibling.
- i) One of Kofi's sisters answered the phone when I called last night.
- j) A newton is a unit of force, acting for one second on a mass of one kilogram, giving a velocity of one meter per second.
- k) Newton died in 1727, and was born in 1642, which is the year that Galileo died.
- l) Objects that are moving close to the speed of light do not obey Newton's laws of motion.
- m) The substance in this beaker is contaminated with DDT.
- n) Any substance contaminated with 5 mg. of DDT is lethal if ingested.

- o) The most toxic pesticide used in recent years in this part of the country is DDT.
- p) DDT is a white chlorinated hydrocarbon used as insecticide (abbreviation for dichlorodiphenyltrichloroethane).
- q) 'Water' is a colourless, transparent, tasteless, odourless compound of oxygen and hydrogen in liquid state convertible by heat into steam and by cold into ice; any liquid consisting chiefly of this in seas, streams, lakes, rain, tears, sweat, saliva, urine,
- r) Every mammal needs water to live.
- s) A mammal is a class of animal having a milk-secreting organ in the female for nourishment of the young and usually quadruped with hair of fur.
- t) A whale is a mammal.
- u) A 'whale' is a marine mammal of order Cetacea.

Assignment 5.2

- (i) Which of the items below express value judgments, and which express empirical (factual) judgments?
 - (ii) Some statements are explicitly empirical statements, and implicitly suggest a value judgment. Which of the following items fall into this category?
 - (iii) Which of the statements below can be characterized as both a value judgment and an empirical statement? Do these belong to category (ii) above? If not, why not?
 - (iv) Which of these statements, if true, are true strictly by definition of the component terms? Is the presupposed definition correct in each case?
 - (v) Which statements appeal to some sense of law? Which sense of law?
1. It is worse to destroy a human life than it is to do any other wrong action.
 2. IMF policies imposed on the Ghanaian population amount to economic genocide.
 3. Without IMF policies rescuing the Ghanaian population, the country would have deteriorated into Civil War like the rest of West Africa.
 4. The reason Structural Adjustment policies have deleterious effects on the majority of people in West Africa is due to the corruption and ineptitude of West African statesmen and administrative officials in government.
 5. Hitler was a short man.
 6. Hitler was an evil man.

7. Abortion is illegal in this country.
8. Abortion is the worst criminal action any human being can commit
9. The practice of euthanasia is an example of how new technologies are corrupting the customs and values of this society.
10. All the talk about AIDS and making condoms available so readily everywhere you go is breaking down the fibre of society, making the youth fall into loose and uncouth behaviour.
11. Environmental degradation in the North is Nature's way of punishing people who have too many children and allow their population to increase without self restraint.
12. AIDS is God's way of punishing promiscuous people.
13. All citizens must be given access to free education.
14. All governments must preserve the economic rights of their own citizens, and not sacrifice their citizens social welfare to the capital interests of foreigners.
15. Every planet must circle the sun in an elliptical orbit.
16. All salts must dissolve in water or some other liquid.
17. Every metal must expand when heated.
18. It ought to rain later today.
19. You ought to save money to buy your books and class materials.
20. All humanity must respect human life.
21. All mammals must have oxygen to live.
22. There is no such thing as marital rape. 'Marital rape' is a contradiction in terms.
23. All citizens must pay taxes.
24. Every Hindu Brahmin must give alms.

Unit summary

In this unit you learned

- How to recognise distinct notions associated with the word 'law'
- How to distinguish an empirical law-like statement from a definition

- How to realise when a statement is true both because of the meaning of the component words as well as because of the way the world is found to be through experimentation or survey
- How to avoid being misled by equivocation on the word 'law'
- How to distinguish value judgments from factual judgments
- How to recognise when statements exhibit both a value judgment and a factual report.