

THE 'DO NO HARM' PRINCIPLE

Frank Vibert

INTRODUCTION

Two perspectives

The maxim 'do no harm' (DNH) is enjoying a surge in popularity. From its early use in the Hippocratic Oath and medical ethics, its deployment has now extended to other areas including bioethics more broadly, education, the environment and internet ethics.¹ It is held to apply to the decision-making of all actors, from individuals and corporations to governments and their regulators. A striking contemporary example is provided in the context of the EU's aim to achieve carbon neutrality by 2050 by the EU's regulatory framework for sustainable investment which '*provides that...the precautionary principle of 'do no significant harm' is ensured*'.²

This paper looks at the sources of the maxim in political economy. The canonical statement on harm occurs in JS Mill's Essay 'On Liberty' where he sets forward '*One very simple principle*'. In summary form this reads, '*The sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of their number, is...to prevent harm to others*'.³ According to some commentators it is the apparent simplicity of the principle that accounts for its lasting popularity.⁴

Mill enunciated his 'do no harm' principle in the context of an analysis of the individual in relation to collective decision-taking by society. As a consequence, much of the subsequent discussion of the principle has been set within the context of Mill's contribution to the liberal tradition.⁵ This paper adopts a different perspective. It places the maxim within the framework of Mill's theory of knowledge.

These two different ways of looking at the harm principle share a common point of departure. The harm principle expresses '*the jurisdictional trigger for society to consider interference of any sort*'.⁶ However, the focus in the context of the liberal tradition is on the justification of policy interventions in relation to the individual. By contrast, a focus on knowledge places the justification of policy interventions in relation to the application and development of a society's state of knowledge. Both perspectives play a central role in Mill's writings. Both perspectives are necessary for assessing the use of the DNH principle in the context of contemporary policy making and regulatory governance.

¹ For a taxonomy of harms see DeMartino 2016. Table 5.1. 74/75.

² Regulation EU 2019/2088. Preamble para.17.

³ Mill On Liberty. 18.

⁴ Smith 2006. 6.

⁵ See for example the collection of essays ed. Gray & Smith (1991) and ed. Ten (2008).

⁶ Turner 2014. 306.

Organisation of the analysis

Mill's approach to knowledge is contained mainly in 'A System of Logic' (1843), together with related extensions and applications in his essay 'On the Definition and Methods of Political Economy' (1844), 'Principles of Political Economy' (1848) and 'On Liberty'(1859). His approach in these writings distinguishes between three different settings.

Mill commenced his theory of knowledge in a form suited to a laboratory setting. His method centred on the experimental testing of hypotheses. Mill next faced the challenge of moving out of the laboratory and applying his approach to the real world. In the real world setting the same rigorous methods cannot be used. However, according to Mill, individuals and societies can still apply epistemic procedures that lead towards more valid claims, improved knowledge and better justifications. The procedures involve being open to disproof (what Mill referred to as 'infallibility') and open to the correction of errors ('corrigibility').

Mill then faced the further challenge of applying his theory of knowledge to the exercise of public authority, what Mill referred to as '*truth in action*'. In this setting, the key issue, according to Mill, is how to encourage conditions that would support both the infallibility and corrigibility principles. He formulated a criterion of 'vitality' as the precondition. The 'do no harm' principle finds its place at the end of this chain of logic as the means to foster 'vitality'.

Each of these three settings in Mill's theorising poses its own challenge. This paper describes the principles Mill developed for each of the three different stages and the chain of logic leading to the 'do no harm' principle. The paper concludes by looking at the use of Mill's DNH principle as a precautionary principle in the context of the EU's climate Action Plan and the framework to facilitate sustainable investment.⁷

MILL'S THEORY OF KNOWLEDGE: HYPOTHESES, TESTING AND VERIFICATION

The external judge

Adam Smith had pioneered the turn to empiricism in the study of social systems with what he termed his 'didactic method'. In his didactic method he claimed to follow the methodology of Isaac Newton in the natural sciences by looking for general principles from which other claims follow.⁸ The general principles in the case of social processes, according to Smith, were those that flowed from human nature. Behind the market lay the motive force of personal desire, behind the law lay the motive force of sympathy, and behind morality lay conscience.

Jeremy Bentham had simplified Smith's motives to two, opening his 'Principles of Morals and Legislation' with the declaration that we are governed by '*two sovereign masters, pain and pleasure*'. However, beyond this simplification was a more radical departure. According

⁷ Notably, The Sustainable Finance Directive Regulation (2019/2088) and the Taxonomy Regulation (2020, 852).

⁸ Smith (1762-3/1983) Lectures on Rhetoric and Belles Lettres: 145

to Bentham, internal sentiments, such as sympathy, needed an external yardstick.⁹ We need to distinguish between internal motives and the reasons which warrant an external observer to approve an act.¹⁰ Bentham also wanted to find an external guide that could be measured.

Adam Smith had recognised the need for an external yardstick and tried to provide for it through the device of the 'impartial external observer'. According to Smith's notion of the external observer, the individual acts as though to divide themselves into two and the one passes judgement on the other.¹¹ However, this rather awkward artifice does not meet Bentham's criteria. Consistent with Smith's method it remains a system of self-reference. In addition, the criteria for making the judgements are unspecified, and measurement is lacking.

According to Bentham, the principle of utility provided the external guide, criterion and measure. Utility provides '*The principle which furnishes us with that reason, which alone depends not upon any higher reason, but which is itself the sole and all-sufficient reason for every point of practice whatsoever*'.¹² In addition, he suggested that pleasure and pain could be measured along seven different dimensions.¹³

Mill shared Adam Smith's desire for a unified approach to the natural and social sciences.¹⁴ His aim was '*to attempt a correct analysis of the intellectual process called Reasoning or Inference*'.¹⁵ According to Mill, '*Nearly the whole, not only of science, but of human conduct, is amenable to the authority of logic*'. However, Mill also shared Bentham's desire for reasoning that was based on an external logic and valid to an external judge. He also rejected reasoning based only on self-reference. He asserted that our conceptions '*do not develop themselves from within, but are impressed upon the mind from without; they are never obtained otherwise than by way of comparison and abstraction*'.¹⁶ He declared, '*Logic is not the science of Belief, but the science of proof, or Evidence*'.¹⁷ He focussed his attention, in particular, on causal reasoning – what causes lead to what effects and what effects can be attributed to what causes.

The method

The first step in Mill's account of reasoning in the natural and social sciences (what he referred to as an 'a priori' method, applicable to both) is the formulation of a hypothesis. The function of hypotheses '*is one which must be reckoned absolutely indispensable...We begin by making a supposition, even a false one, to see what consequences will flow from*

⁹ Bentham (1789/1982) Principles of Morals and Legislation: 21-33.

¹⁰ Principles of Morals and Legislation 32.

¹¹ Smith (1759/1948) The Theory of Moral Sentiments (Part II Section III:140).

¹² Bentham (1776/1891) A Fragment on Government. 163.

¹³ Bentham. Principles of Morals and Legislation. 38-49.

¹⁴ Ryan (1970) Introduction. xv.

¹⁵ Mill, A System of Logic. Introduction. 12.

¹⁶ A System of Logic. Book IV. 653.

¹⁷ A System of Logic. Introduction. 9

it'.¹⁸ According to Mill, the 'a priori' method was '*The only method by which truth can possibly be attained in any department of the social sciences*'.¹⁹

The second step (what Mill referred to as 'induction') involved '*the operation of discovery and proving general propositions*'.²⁰ The great difficulty in developing proofs relating to causation, according to Mill, arises because we are usually dealing with multiple causes. The sequence '*Is seldom, if ever, between a consequent and a single antecedent.....It is usually between a consequent and the sum of several antecedents*'.²¹ For Mill certainty about causation involved bringing together the sum, or assemblage, of all the antecedents of the effect and a method '*which considers the causes separately and infers the effect from the balance of the different tendencies which produce it*'.²² For this purpose Mill developed in his 'System of Logic' a 'fourfold method of experimental inquiry'. This involved a method for testing causal hypotheses and for trying to distinguish between multiple possible causes. The fourfold method assumes that different conditions require different methods of inference in order to arrive at valid conclusions.²³

The third step in Mill's methodology involved verification. '*To warrant reliance on the general conclusions arrived at by deduction, these conclusions must be found, on careful comparison, to accord with the results of direct observation wherever it can be had*'.²⁴

What is of crucial importance in Mill's approach is the insistence on the experimental testing of hypotheses. '*Observation ...without experiment ...can ascertain sequences and coexistence, but cannot prove causation*'.²⁵ Mill's insistence on testing and experiment can be seen as representing a revolution in social studies.²⁶ Karl Popper was to note that what he called 'causal explanation' or 'deductive explanation' in his 1934 'The Logic of Scientific Discovery' had been '*anticipated without my being aware of it, by JS Mill*'.²⁷

The laboratory setting

Mill's set of methods were those suited to experimentation, testing and observation in research or laboratory conditions.²⁸ He ascribed two great advantages to the laboratory setting. First, it allows us to bring together a much greater number of variations than '*nature spontaneously provides*'. Secondly, we can control the experiment. '*We can produce a phenomenon artificially, we can take it, as it were, home with us, and observe it in the midst of circumstances with which in all other respects we are accurately acquainted*'.²⁹

¹⁸ A System of Logic. Book III. 496.

¹⁹ Essay on the Definition and Method of Political Economy. 1844/2012. 46.

²⁰ A System of Logic. Book III. 284.

²¹ A System of Logic. Book III. 327. See also Essay: '*Effects are commonly determined by a concurrence of causes*'. 55.

²² A System of Logic. Book III. 453.

²³ See the discussion in White 2000.

²⁴ A System of Logic. Book III. 460.

²⁵ A System of Logic. Book III. 386.

²⁶ See Ducheyne 2008. Popper includes Mill in a group of epistemologists that 'replaces the Humean problem of 'reasonable belief' by the problem of the reasons for accepting or rejecting scientific theories'. Popper, The Logic of Scientific Discovery xxvi.

²⁷ Popper 1976 Unended Quest. 117.

²⁸ White 2000. 443.

²⁹ A System of Logic. Book III. 384.

Mill emphasised that the proof of hypotheses in the social sciences started from a point of 'great disadvantage' because the circumstances are '*never perfectly known to us*' and '*the greater part of the processes concealed from our observation*'.³⁰ Moreover, '*It is seldom in our power to make experiments in them*'.³¹ Nevertheless, Mill thought that we could still subject hypotheses to experiment and arrive at an 'abstract' truth. '*When completed by adding or subtracting the effect of the non-calculated circumstances, they are true in the concrete, and may be applied in practice*'.³²

Mill published the first edition of his Logic in 1843 and revised it in his lifetime through eight subsequent editions until 1872. It has been argued that the later Mill no longer saw his methods, even in research conditions, as leading to complete certainty about cause and effect and that he realised that the goal of absolute certainty was not attainable. Instead, his approach provided a method of justification, a method for revising a provisional judgement about cause and effect and a path to revisable conclusions.³³

Mill seems to have carried over this view on the provisional nature of our judgements, and the need to be able to revise them, into his understanding of reasoning and claims about knowledge in the real world.³⁴ The quest is for '*the best that the existing state of human reason admits of*'.³⁵ In his search for 'the best' in the social sciences, Mill turned to the role of 'Approximate propositions': '*There is a case in which approximate propositions...are yet, for the purposes of science, universal ones; namely in the inquiries which relate to the properties not of individuals, but of multitudes. The principal of these is the science of politics, or of human society*'.³⁶

APPROXIMATE PROPOSITIONS IN THE REAL WORLD

Progress

Mill shared the belief of the Victorian age in social 'progress', and individual and social 'betterment'. He declared, '*It is my belief indeed that the general tendency is, and will continue to be...one of improvement; a tendency towards a better and happier state*'.³⁷ He also acknowledged his utilitarian heritage. However, he did not equate progress either with the higher material standards of living achieved in the Victorian age, or, with the single 'pleasure versus pain' calculus used by Bentham as the external measure of progress. Mill wrote, '*I regard utility as the ultimate appeal on all ethical questions; but it must be utility in the largest sense, grounded on the permanent interests of man as a progressive being*'.³⁸

³⁰ Essay. 47.

³¹ Essay. 42. See also. A System of Logic. '*The first difficulty which meets us in the attempt to apply experimental methods for ascertaining the laws of social phenomena, is that we are without the means of making artificial experiments*'. Book VI. 881.

³² Essay.49.

³³ Ducheyne 2008.

³⁴ See Philips 2019 for a view of the importance of uncertainty in Mill's response to the real world.

³⁵ On Liberty. 34

³⁶ A System of Logic. Book III. 603. See also A System of Logic. Book VI. 847. '*An approximate generalization is, in social inquiries, for most practical purposes equivalent to an exact one*'.

³⁷ Mill a System of Logic. Book VI. 914.

³⁸ On Liberty 20

Mill did not define exactly what he meant by *'utility in the largest sense'* or *'the permanent interests of man as a progressive being'*. However, it has been suggested that what Mill took from the utilitarian tradition was above all a commitment to rationality in human affairs.³⁹ From this perspective, Mill's notion of 'Progress' can be understood as more securely grounded knowledge and more securely grounded justifications for claims to know. He stated, *'We are justified in concluding, that the order of human progression in all respects will mainly depend on the order of progression in the intellectual convictions of mankind'*.⁴⁰

In moving from research conditions to the real world, Mill accepted that he was moving away from the world of controlled experiments for testing hypotheses and into the world of *'non calculated circumstances'* and *'approximate propositions'*. However, he still wanted to find some real-world epistemic principles that would promote 'progression' in our intellectual convictions. He put forward two: an 'infallibility' principle and a 'corrigibility' principle.

The infallibility principle

The first principle in the search for the best of human reason, according to Mill, is what he calls the 'infallibility' principle. The infallibility principle is about recognising the provisional nature of our reasons to accept a hypothesis and our claims to 'know'. It is about how all our claims to know should be viewed as open to the possibility of disproof. He stated in his *System of Logic*, *'It is not, I conceive, a valid reason for accepting any given hypothesis, that we are unable to imagine any other that will account for the facts. There is no necessity for supposing that the true explanation must be one, which, with only our present experience, we could imagine'*.⁴¹ He placed a similar importance on being open to disproof in *'On Liberty'*: *'On no other terms can a being with human faculties have any rational assurance for being right'*.⁴²

In order to be open to disproof, we must first acknowledge the imperfect state of our knowledge and the insecure basis of our claims to know. Truths in the real world, according to Mill *'for the most part'* are only half truths.⁴³ Secondly, we must be open to rival claims about the inferences we draw from our perception of the facts. *'Even in natural philosophy, there is always some other explanation of the same facts;and it has to be shown why that other theory cannot be true.... But when we turn to subjects infinitely more complicated, to morals, religion, politics, social relations, and the business of life, three fourths of the arguments for every disputed opinion consist in dispelling the appearances which favour some opinion different from it'*.⁴⁴

According to Mill If we do not acknowledge both the imperfect state of knowledge and the possibility of the disproof of our claims to know, then we make an unjustified claim to

³⁹ Ryan (2012) 259.

⁴⁰ Mill. *A System of Logic*. Book VI. 927.

⁴¹ *A System of Logic*. Book III. 503.

⁴² *On Liberty* 31.

⁴³ *On Liberty* 80

⁴⁴ *On Liberty* 54.

certainty or a claim to ‘infallibility’. *‘The beliefs which we have most warrant for, have no safeguard to rest on, but a standing invitation to the whole world to prove them unfounded’.*⁴⁵ Mill’s infallibility principle is echoed in the 20th century by Popper’s falsifiability criterion: *‘The criterion of the scientific status of a theory is its falsifiability, or refutability, or testability’.*⁴⁶

Infallibility, expertise and the wise

In the light of this demanding epistemic criterion that society must always be open to rival claims about the inferences we can draw about our state of knowledge in the real world, it would seem to follow that Mill would have favoured the role of experts for evaluating and challenging claims about our state of knowledge. However, Mill was opposed to a government trying to bring together the most knowledgeable in society into its own administrative machinery. In his view it would contribute to the ‘*great evil*’ of adding unnecessarily to government power and deprive society of learning through the ‘*varied experiments and endless diversity of experience*’ that accrues from individuals and voluntary associations.⁴⁷ *‘The evil would be greater, the more efficiently and scientifically the administrative machinery was constructed – the more skilful the arrangements for obtaining the best qualified hands and heads with which to work it’.*

Mill’s concern was to head off the growth of the bureaucratic state which he saw as a recipe for decline. *‘The absorption of all the principal ability of the country into the governing body is fatal, sooner or later, to the mental activity and progressiveness of the body itself’.*⁴⁸ According to Mill, the role of central government lay in diffusing information and knowledge developed elsewhere.

In contemporary practice, modern government has become dependent on specialised expert agencies. They seem to offer an advantage in mobilising knowledge and information for ‘evidence based’ policy making and are able to harness both practitioner experience of rulemaking together with theoretical knowledge. Mill’s desire for knowledge to develop outside government is met in the way that expert agencies are usually set at arm’s length from central government departments. While they remain beholden to government for their creation, terms of reference, and can be abolished by governments, nevertheless, expert agencies can be viewed as their own branch of government with their legitimacy based in part on how far they adhere to the epistemic standards of their disciplines.⁴⁹

Corrigibility principle

Mill had to reconcile his view that all our claims to know in the real world should be seen as provisional, subject to verification and open to disproof, with the possibility of progress in our understandings. He attributed this possibility to our ability to learn from a process of trial and error. *‘We find the right conception by a tentative process, trying first one and then*

⁴⁵ On Liberty 34.

⁴⁶ Popper Conjectures and Refutations 37. He noted *‘Every genuine test for a theory is an attempt to falsify it, or to refute it. Testability is falsifiability’.* (ibid 36).

⁴⁷ On Liberty 156.

⁴⁸ Mill. On Liberty 160.

⁴⁹ See Vibert 2007.

another until we hit the mark'.⁵⁰ The ability to correct our errors depended in large part on the verification that comes from observation. By observing how our hypotheses *'differ from the real phenomenon, we learn what corrections to make in our assumptions'*.⁵¹ He believed that the preponderance of conduct and opinion in the world was rational because of our ability to correct errors. Corrigibility is *'the source of everything respectable in man, either as an intellectual or as a moral being'*.⁵²

Corrigibility involved the possibility of exchanging error for truth or *'what is almost as great a benefit'* a clearer perception of truth.⁵³ He thus asserted, *'The whole strength and value, then, of human judgement, depending on the one property, that it can be set right when it is wrong, reliance can be placed on it only when the means of setting it right are kept constantly at hand'*.⁵⁴

Corrigibility and custom

Mill's insistence on the need to keep perceptions of the truth under constant review and open to continuous correction led him to share Bentham's scepticism of traditional sources of authority. He wrote, *'the despotism of custom is everywhere the standing hindrance to human advancement'*.⁵⁵ Bentham's objection to custom as a guide to the right mandate was that custom was likely to be invoked to protect privileged interests rather than to serve the general interest. Mill shared this objection. However, his main objection was that custom and habit represented *'magical influence'* or opinion unsupported by reasons. As a result, custom reflected only *'liking'* something rather than giving reasons to prefer one mandate to another. *'An opinion on a point of conduct, not supported by reasons, can only count as one person's preference; and if the reasons, when given, are a mere appeal to a similar preference felt by other people, it is still only many people's liking instead of one'*.⁵⁶

At the same time as insisting that our habits should be kept under constant review, Mill followed Hume in recognising the benefits of expectations about behaviour that were aligned, *'In the conduct of human beings towards one another, it is necessary that general rules should for the most part be observed, in order that people may know what they have to expect'*.⁵⁷ He also acknowledged the importance of reciprocity in society and stated that *'Everybody who benefits from protection owes a return for the benefit and is bound to observe a certain line of conduct towards the rest'*.⁵⁸ In addition, he saw the principle and practice of cooperation as *'no more certain incident of ...progressive change'*.⁵⁹ The debate was about what provides a positive dynamic to social interaction in the absence of relying on habit and custom.

⁵⁰ A System of Logic. Book IV. 655.

⁵¹ A System of Logic Book III. 496.

⁵² On Liberty. 32.

⁵³ On Liberty. 28

⁵⁴ On Liberty. 32.

⁵⁵ On Liberty 99.

⁵⁶ On Liberty 13.

⁵⁷ On Liberty 109.

⁵⁸ On liberty 106

⁵⁹ Principle of Political Economy. Book IV. 708.

Adam Smith had identified 'conscience' (the ability to judge the before-and-after-effects of our actions) together with our desire to emulate others and our desire for social 'esteem' as providing a motivation for our social interactions and a positive social dynamic.⁶⁰ Bentham had accepted that a desire for a good reputation or esteem was often consistent with his utility principle.⁶¹ However, for Mill, the key benefit from social interactions was the better understanding arising from contact and discussion with those who think differently. He wrote that in order to 'know' people need to have '*thrown themselves into the mental position of those who think differently from them, and considered what such persons have to say*'.⁶² It is through contact and discussion that we can correct our received views.

It is also through contact and discussion that Mill finds the pathway to mobilising knowledge in the formation of public policy. John Rawls later noted in relation to freedom of speech, assembly and liberty of thought and conscience, '*As JS Mill argued, they are necessary if political affairs are to be conducted in a rational fashion. While rationality is not guaranteed by these arrangements, in their absence the more reasonable course of policy is bound to be overlooked if not concealed by special interests*'.⁶³

THE EXERCISE OF PUBLIC AUTHORITY

Truth for the purposes of action

When Mill turned to the exercise of public authority, or what he referred to as '*a correct judgement of great practical affairs*', and '*truth for the purposes of action*', he accepted that we often act without proof. '*The causes which present themselves in life are too complicated, and our decisions require to be taken too rapidly, to admit of waiting till the existence of a phenomenon can be proved*'.⁶⁴ Nevertheless, governments still had to act according to the 'truest opinions' they could. '*It is the duty of governments, and of individuals, to form the truest opinions they can, to form them carefully, and never to impose them upon others unless they are quite sure of being right*'.⁶⁵

Even if we could not wait for proof, Mill maintained that we could approach 'the truest' and 'the right' by encouraging the conditions that would help verify or disprove and correct the provisional truths on which governments act.

Verification, according to Mill, meant comparing the predicted results from our hypotheses with actual results. '*The discrepancy between our anticipations and the actual fact is often the only circumstance which would have drawn out attention to some disturbing cause which we had overlooked*'.⁶⁶ Discrepancy would tell governments that the assumptions on which they had made their laws might be wrong and that both their assumptions and practice might need to be changed.

⁶⁰ Smith. (1759/1948) *The Theory of Moral Sentiments* (Part II, Section III: 140).

⁶¹ Bentham(1789/1982) *Principles of Morals and Legislation*.118.

⁶² *On Liberty* 56.

⁶³ Rawls, 1972 '*A Theory of Justice*'. 225.

⁶⁴ *A System of Logic*. Book III. 592.

⁶⁵ *On Liberty* 31.

⁶⁶ *Essay* 51.

‘Art’

Mill also referred to the exercise of public authority as ‘art’. The distinction he makes in this designation is between the role of moral rules and precepts in the exercise of authority, compared to reasoning about public policy based on the natural and social sciences such as economics. Mill regarded moral precepts as categorically different from scientific laws. He followed Hume in distinguishing between ‘ought’ statements and ‘is’ statements.⁶⁷

Separation in hard form between the ‘ought’ and the ‘is’ maintains that we cannot infer statements about values from statements about facts and that there are no matters of fact about values.⁶⁸ Mill rejected this hard form of separation. In the context of ‘truth for the purposes of action’, Mill is clear that our moral precepts are open to study and correction, not only because we may revise our ethical thinking, but also in the light of our scientific reasoning.

According to Mill we must constantly refer back our ethical maxims to our analyses of causes and effects.⁶⁹ The reasoning of the natural and social sciences can inform the means we use to pursue our moral ends and can also show the consequences and effects of our ethical precepts.⁷⁰ For example, Mill noted in relation to the various policies governments might adopt, for normative reasons, in respect of the distribution of wealth, that, *‘The conditions on which the power they possess over the distribution of wealth is dependent, and the manner in which the distribution is effected by the various modes of conduct which society may think fit to adopt, are as much a subject of scientific enquiry as any of the physical laws of nature’*.⁷¹ Thus, according to Mill, the reasoning of the natural and social sciences helps to inform our moral precepts and to correct them if necessary. *‘In the complicated affairs of life, and still more in those of states and societies, rules cannot be relied on, without constantly referring back to the scientific laws on which they are founded’*.⁷²

Majoritarian government

In Mill’s time, the conditions for encouraging discovery, verification, and correction in the exercise of authority had to be fostered under majoritarian forms of government. The franchise, albeit still limited, was being extended so that majoritarian forms of political decision-taking were becoming the norm. Bentham had broadly welcomed the arrival of majoritarian forms of government because he saw it as consistent with the goal of the ‘greatest happiness of the greatest number’ and consistent with eroding the power of special interests. Like Madison, Bentham saw ‘faction’ as the main obstacle to representative government. For Mill, however, special interests and faction were not the principal problem for more representative government – it was lack of knowledge. *‘Those whose opinions go by the name of public opinion, are not always the same sort of*

⁶⁷ A System of Logic. Book VI. 949.

⁶⁸ Davis 2016 .203.

⁶⁹ A System of logic. Book VI. 946.

⁷⁰ A System of logic. Book VI. 950.

⁷¹ Principles of Political Economy. 21.

⁷² A System of Logic. Book VI 945.

public...But they are always a mass, that is to say, collective mediocrity'.⁷³ He saw a need for the institutions of government to provide a defence against ill-informed majoritarianism.

Two types of 'tyranny'

In considering where majoritarian forms of government could go wrong, Mill distinguished between two types of mistaken collective imposition. The first type he termed the tyranny of the magistrate – the misuse of the power of governments to enforce laws. The second type, he referred to in terms of the tyranny of issuing wrong 'mandates' rather than right or, in other words, making laws based on flawed assumptions.⁷⁴ According to Mill, the second class of 'tyranny' flowed from following prevailing opinion on any subject when opinion is not supported by reasons. In discussing how majoritarian societies could avoid the imposition of mistaken policies and legislation, Mill found the source of social betterment in the notion of 'vitality'.

Vitality/ energy

Mill's 'vitality' principle asserted that the conditions for betterment were best met through an 'energetic' and 'intellectually active people' outside of and independent of government.⁷⁵ It is an energetic and intellectually active people that can provide society with a path to better understandings in all areas of 'art' and 'the business of life'. According to Mill, two sources of lesson learning are crucial for betterment: lessons from experience and lessons from discussion. They apply both to reasoning drawn from the natural and social sciences on which policy might rest, and also to moral reasoning.

Experience

In writing about how societies learn from experience Mill referred to '*experiments of living*'. Experiments of living provide us with a means of verifying the assumptions of governments because they give us an additional means of making generalisations. '*A principle ascertained by experience, is more than a summing up of what has been specifically observed in the individual cases which have been examined, it is a generalization grounded on those cases*'.⁷⁶ Inferences based on personal experience enable us to go from particulars to particulars and arrive at '*a very considerable power of accurate judgement*' without intermediate general propositions.⁷⁷ Moreover, 'experiments in living' conducted by many individuals provide us with many examples from their experiences and can improve our general propositions. '*A general proposition collected from particulars is often more certainly true than any one of the particular propositions from which ...it was inferred*'.⁷⁸

Mill had asserted in relation to his famous support for reforming divorce laws that in our individual behaviour we should not enter into irrevocable long term future commitments

⁷³ On Liberty 94.

⁷⁴ On Liberty.12.

⁷⁵ On Liberty 160

⁷⁶ A System of Logic. Book II .163.

⁷⁷ A System of Logic. Book II. 188.

⁷⁸ A System of Logic. Book IV. 643.

without experience.⁷⁹ Analogously, in the world of public policy, commitments also should be based on individual experience.

Discussion

Even in respect of observations and testing in laboratory conditions, Mill recognised there was always room for more than one interpretation of findings. In the case of his turn to 'experiments of living' as a verification procedure outside the controlled setting of the laboratory he had to allow for even greater possibility of different interpretations and mistaken inferences. The experience might be too narrow or not suited to different circumstances. He therefore saw discussion as the essential means for us to correct the inferences we draw. '*There must be discussion to show how experience is to be interpreted*'.⁸⁰ Moreover, this discussion had to be of a certain type. It had to be fully open. It also had to be conducive to reasoned discussion about differences. '*We are justified in assuming truth for purposes of action when there is complete liberty of contradiction and disproof*'.⁸¹ In the 20th century John Rawls adopts this contention as one of two arguments in support of democratic participation that he takes from Mill.⁸²

Methodological individualism

According to Mill's theory of knowledge the 'do no harm' principle arrives at the end of this chain. The principle of non-interference with individuals in the absence of evidence that their actions are harmful to others provides the means and the space for cultivating energetic individuals whose personal experience of what he referred to as '*the business of life*' could be generalised for society as a whole and whose discussions help provide the verification, or disproof and corrections needed to improve the knowledge base for public policy. It provides the foundation for 'vitality' in society.

Bentham had expressed his methodological individualism in terms of 'interest'. He had famously written '*The community is a fictitious body, composed of the individual persons who are considered as constituting as it were its members. The interest of the community then is, what? – the sum of the interests of the several members who compose it*'.⁸³ Mill's DNH principle reflects an analogous consistent methodological individualism relating to social knowledge. It is about harvesting the sum of knowledge in society from generalisations based on individual experience and discussion with others. Mill's energetic and intellectually active people cannot be sure to achieve certainty for truth in action. But the diversity of experiments of living and the clash of contrary opinions opens the path to betterment. '*We are far enough from certainty still, but we have done the best that the existing state of human reason admits of*'.⁸⁴

⁷⁹ Mill. Principles of Political Economy. Book V. 953.

⁸⁰ On Liberty 32.

⁸¹ On Liberty 31.

⁸² See Freeman 2007. 25.

⁸³ Bentham (1789/1982) Principles of Morals and Legislation.12.

⁸⁴ On Liberty 34.

When viewed according to the liberal tradition as a demarcating principle between choices that belong to the private sphere and choices that belong to the public sphere the application of Mill's apparently '*one very simple*' do no harm principle has long been criticised as not simple at all.⁸⁵ Similarly, this discussion has shown that from the perspective of Mill's theory of knowledge, his 'one very simple principle' is also not simple at all. It is a derivative of three overarching epistemic principles: A 'fallibility' principle that states that our claims to certainty in the real world must be regarded as provisional and open to disproof; a 'corrigibility' principle that in order to reflect progress in our understanding of the world we must have procedures that allow us to correct received understandings and practices, and a 'vitality' principle that we need our authority structures to advance our understandings by encouraging open discussion and 'experiments of living'.

THE DNH PRINCIPLE AND THE EU'S FRAMEWORK FOR SUSTAINABLE INVESTMENT

Mill lived at a time when the functions of government and the instruments to achieve collective objectives were very rudimentary compared with today. He himself regarded many of the functions of government as 'optional'.⁸⁶ According to Mill, much of what the government does can be attributed to simple 'convenience'.⁸⁷ His analysis of the tasks of government distinguished between only two main tasks, the enforcement role and the policy making role.

The EU's sustainability framework provides a useful test case of how far Mill's 'do no harm' principle remains useful as a guide to legislative and regulatory interventions in today's very different circumstances. The framework is central to arguably the most important area of public policy in today's world – climate change. In addition, the key EU regulations, the sustainable finance directive regulation (SFDR)2019/2088, June 2019) and the Taxonomy regulation (2020/852, June 2020) are both based on the do no (significant) harm principle: Art 2 para.17 of the 2019 Regulation defines 'sustainable investment' as meaning '*an investment in an economic activity that contributes to an environmental objective.....provided that such investments do not significantly harm any of those objectives...*'. The same definition is carried into the 2020 taxonomy Regulation.

The 2020 taxonomy is presented as a '*key step*' towards achieving the EU's goal of a climate-neutral Union by 2050 and the '*most important and urgent action*' envisaged under the Commission's action plan. Among its aims, it is intended to underpin the investments carried out through the European Fund for Strategic Investment and help channel private investment alongside public. It is supported by the Low Carbon Benchmark Regulation (2019/2089) that aims to standardise methodologies used in low carbon investment indices. It is being followed up with a proposed directive on Corporate Sustainability Reporting

⁸⁵ See for example Turner (2014) on the controversies over the definition of 'harm' and Weinstein (2010) for a discussion of different views as to how far Mill's utilitarianism is consistent.

⁸⁶ Mill. Principles of Political Economy. Book V. 799/800.

⁸⁷ Principles of Political Economy. Book V. 803.

(CSRD) that brings accounting standards for the EU's corporate sector into line with the taxonomy.

The sustainability framework and Mill's criteria

The EU's framework can be evaluated against each of Mill's overarching criteria, corrigibility, vitality and infallibility, from which the 'Do No Harm' principle is derived.

Corrigibility

The EU's Taxonomy Regulation (2020/852) sets out six environmental objectives (Art 9) against which significant harm should be assessed (Art.17). Four of the six objectives in the EU Regulation against which harm should be measured can be viewed as about correcting for past mistakes in public policy. This applies to measures to restore biodiversity and to protect ecosystems (Arts 9f & 17f) and to protect water and marine resources (Arts 9c & 17c). Measures to reduce the generation of waste (Arts 9d & 17d) and to control pollution (Arts 9e & 17e) can be similarly seen as about correcting for past mistakes. Each of these objectives provide a defence against the repetition of past negligence and can be seen as consistent with Mill's view that policies should always be attentive to correcting for past errors.

Vitality

Mill's vitality principle consisted of two components. The first concern was to protect reasoned discussion and to encourage a sympathetic consideration of the reasoned views of others.⁸⁸ The framework established by the sustainable finance regulations aims to achieve clarity on which activities count as 'green' or 'sustainable' and to prevent 'greenwashing'. Among other features, the taxonomy regulation requires that fund managers and institutional investors disclose how and to what extent they use the criteria so that investors can understand the investment labelling. The proposed CSRD extends reporting clarity more widely across accounting and auditing standards in the corporate sector. Both public and private experts and representatives of civil society in the 'Platform for Sustainable Finance' - the expert body set up to advise the Commission – help to draw up the criteria in these regulations and directives. The combination of clarity over objectives, about what needs to be disclosed, and the drawing on outside expertise, should each contribute to reasoned discussion and decision making.

The second component of Mill's vitality principle was about the need for 'experiments of living'. The question this raises is how far uniform EU-wide Regulations are consistent with lesson learning from different approaches to assessing harm by different actors, businesses and investors, in different member states. The justification for a uniform approach provided in the Preamble to the 2020 Taxonomy Regulation is in terms of removing obstacles to the efficient movement of capital in the EU's single Market and removing barriers to raising funds for sustainability projects. The Regulation asserts that different national labelling schemes, different criteria and the absence of uniform criteria would increase costs and act as a disincentive to cross border investment flows. (Preamble, provisions 11 & 12).

⁸⁸ See the discussion in Cohen-Almagor (2017).

The crucial assertion in the case for uniformity provided in the 2020 Regulation is that *'if financial market participants use different concepts in their explanations of what an environmentally sustainable activity is, investors will find it disproportionately burdensome to check and compare different final products'*. (Preamble para.13). However, there is a case following Mill for saying that the evidence base for informing normative judgments might be better developed by allowing for greater experimentation. Mill's logic would suggest that the net benefits from greater experimentation would outweigh the additional costs and burdens.

In short, the provisions in the EU regulations are only partly consistent with the vitality criterion. Improved standards of disclosure may help improve the quality of discussion, but uniformity deprives EU actors of the benefits of 'experiments of living'.

Infallibility

The first two provisions of the EU's sustainability framework (Art.17 a & b 2020/852) refer to the need to avoid economic activities that would significantly harm the EU's climate change mitigation and adaptation objectives (Art. 9 a & b). Together with the Low Carbon Benchmark Regulation, they reflect the EU's support for the UN's 2030 Sustainable Development Goals and are based on the current consensus among climate scientists that there is a significant human contribution to global warming. Nevertheless, they run counter to Mill's strong warning against governments taking preventative measures based on scientific projections.

Mill's insistence on the imperfect state of our knowledge in addressing 'great practical affairs' led him to caution strongly against policy actions justified by reference to projected future harms. Mill wrote, *'The preventative function of government... is far more liable to be abused, to the prejudice of liberty, than the punitive function'*.⁸⁹

Bentham had pointed out that preventative action by governments could go wrong on two grounds: because the imagined circumstances did not exist or because the action was based on erroneous suppositions.⁹⁰ However, he emphasised the deterrent effect of the law as the way in which the law was preventative and future oriented. He also seems to have envisaged a role for preventative measures in the form of 'indirect' legislation where laws are motivated by some general ethic of beneficence.⁹¹ Mill was familiar with Bentham's views on indirect legislation.⁹² Nevertheless, he opposed preventative measures in much stronger terms.

Mill seems to have based his opposition on three grounds related to his infallibility principle. First, the social sciences are not exact. *'Even if our science of human nature were theoretically perfect...as the data are never all given, nor ever precisely alike in different cases, we could neither make positive predictions, nor lay down universal propositions'*.⁹³

⁸⁹ Mill. On Liberty 136.

⁹⁰ Bentham. An Introduction to the Principles of Morals and Legislation.90-91.

⁹¹ See Bentham (ibid. 289-292) and Quinn (2017).

⁹² Brunon-Ernst. (2017).

⁹³ Mill. A System of Logic. Book VI. 847.

Secondly, we also run the risk of misapplying abstract scientific truths as if they '*were true absolutely, and no modifying circumstances could ever by possibility exist*'.⁹⁴ Thirdly, there was the danger of misinterpreting trends. If our knowledge of our present state is at best approximate, our ability to make knowledgeable advance judgements about future states is even more uncertain. We run the danger of confusing what might simply be a tendency with a predictive certainty.⁹⁵

Mill's warning against preventative actions by governments has been weakened, at least in part, by developments in 21st century governance. Governments now have a range of instruments to accomplish collective ends.⁹⁶ In particular, the development of a regulatory space, poised between public spending, the law and informal social norms, equipped with a flexible range of instruments, has opened up the ways in which governments can act pre-emptively and preventively against future harms. The choice has moved away from relying on the deterrence effect of the law to one where, for regulators, recourse to the law is a last resort. Nevertheless, it remains a misunderstanding of Mill's conception of the 'do no harm' principle to view it as a simple precautionary principle justifying action against projected future harms. It is not a precautionary maxim based on projections of developments into the future but a caution against relying on such projections.

In the context of climate change Mill's caution means that we should always be open to other or additional causalities behind global warming other than a human contribution. Because of the uncertainties we should also be cautious about how far we can justify government interventions to mitigate or adapt to climate change based on one view of causality. According to Mill, at one end of the spectrum we need more 'experiments of living', challenge and discussion. At the other end, we need efforts to improve the rigour of climate research.

Thus, taking each of Mill's criteria in turn, the EU's Regulations on the framework for sustainable investment are consistent with Mill's corrigibility principle, only in part consistent with the vitality principle and are challenged by Mill's infallibility principle.

CONCLUSIONS

If we take the 'do no harm' principle as the starting point for Mill's theory of knowledge, the first proposition is that the DNH principle is a necessary condition for the 'vitality' required for more knowledgeable and more informed justifications for public policies under majoritarian forms of government. It facilitates 'experiments of living' and open discussion. The second step in his argument is that vitality is a necessary underpinning for the openness to disproof and correction needed to achieve social progress in the real world - defined by Mill in terms of continuous improvement in our state of knowledge. In the third and final step, we still need to recognise that justifications and claims made in the real world are often approximations and will not usually approach the levels of assuredness that we can

⁹⁴ Mill. *A System of Logic*. Book V. 808.

⁹⁵ Mill. *Essay*. 56. See also *A System of Logic*. Book VI. 898-900.

⁹⁶ Ross (1901) provides the pioneering 'social control' approach to the techniques of modern governance & Hood (1983) provides the more recent 'tools of government' perspective.

reach in a laboratory setting, where we can apply more formal and rigorous methods for testing our hypotheses.

The 'do no harm' maxim has a continuing applicability in modern government because it points towards these overarching principles. At the same time the Do No Harm principle can easily be misunderstood. It does not justify an individualism that is unreceptive to the views of others or to the findings of science. On the contrary, Mill insisted on the importance of discussion with other of contrary views and on the need for our ethical precepts to be informed by the natural and social sciences. At the same time, when governments try to justify taking preventative or precautionary actions based on scientific projections of harm, the principle also points to the importance of recognising the uncertainties of knowledge and that the predictions of science may be flawed.

References:

- Bentham Jeremy. (1776/1891) *A Fragment on Government*. Ed. FC Montague. Clarendon Press. Oxford.
- Bentham Jeremy. (1789/1982). *An Introduction to the Principles of Morals and Legislation*. Ed. J.H. Burns & HLA Hart. Methuen. London.
- Brunon-Ernst, Anne (2017) Nudges and the Limits of Appropriate Interference. *History of European Ideas*. 43 (1) 53-69.
- Cohen-Almagor R (2017) J.S. Mill's Boundaries of Freedom of Expression; A Critique. *Philosophy*. 92(4) 565-596.
- Davis, John B. (2016) Economists' Odd Stand on the Positive-Normative, Ought/Is distinction. In (eds DeMartino George F and McCloskey Deidre N) *The Oxford Handbook of Professional Economic Ethics*. Oxford University Press.200-218.
- DeMartino George F (2016) Econogenic Harm. In (eds DeMartino George and McCloskey Deidre N) *The Oxford Handbook of Professional Economic Ethics*. Oxford University Press. 71-97.
- Ducheyne, Steffen (2008) J.S. Mill's Canons of Induction: From true causes to provisional ones. *History and Philosophy of Logic*. 29 (4) 361-376.
- Freeman, Samuel (2007) *Rawls*. Routledge.
- Gray John & Smith GW (eds) (1991) *JS Mill On Liberty in Focus*. Routledge.
- Hood, Christopher, (1983). *The Tools of Government*. Macmillan. Basingstoke.
- Mill, J.S. (1843/1872/1973) A System of Logic, Ratiocinative and Inductive. (8th ed). In *Collected Works of John Stuart Mill* vols. VII & VIII (Ed. J. M. Robson). University of Toronto Press.
- Mill, J.S. (1844/2012) On the Definition and Method of Political Economy. In David M Hausman (ed) *The Philosophy of Economics*. Cambridge University Press. 41-58.
- Mill, J.S. (1848/1871/1965) Principles of Political Economy. (7th ed) In *Collected Works of John Stuart Mill* vols II & III. (Ed. J. M. Robson) University of Toronto Press.
- Mill J. S. (1859/2001) *On Liberty*. The Electric Book Co. London.
- Philips, Menaka (2019) Troubling Appropriations: J.S. Mill, liberalism, and the virtue of uncertainty. *European Journal of Political Theory*. 18 (1) 68-88.
- Popper Karl R (1934/2002) *The Logic of Scientific Discovery*. Routledge.
- Popper Karl R (1963) *Conjectures and Refutations*. Routledge & Kegan Paul.

Popper Karl R (1976) *Unended Quest*. William Collins Sons & Co.

Quinn, Michael (2017) Jeremy Bentham Choice Architect: law, indirect legislation and the context of choice. *History of European Ideas*. 43 (1)11-33.

Rawls, John (1972) *A Theory of Justice*. Oxford University Press.

Ross, Edward A (1901/1969) *Social Control: A Survey of the Foundations of Social Order*. The Press of Case Western Reserve University. Cleveland. Ohio.

Ryan, Alan (1970). *John Stuart Mill*. Pantheon Books. New York.

Ryan, Alan (2012) *The Making of Modern Liberalism: Mill's Essay On Liberty*. Princeton University Press. 257-278.

Smith Adam, (1762-63/1983) *Lectures on Rhetoric and Belles Lettres*. (ed. J C Bryce) Clarendon Press. Oxford.

Smith, Adam (1759/1948) *The Theory of Moral Sentiments*. (ed. H.W Schneider). Harper & Row. New York.

Smith, Steven D. 2006. Is the Harm Principle Illiberal? *American Journal of Jurisprudence*. 51. 1-42.

Ten C.L. (2008) (ed) *Mill's On Liberty. A critical guide*. Cambridge University Press.

Turner, Piers Norris (2014) "Harm" and Mill's Harm Principle. *Ethics*. 124 (2) 299-326.

Vibert, Frank. 2007. *The Rise of the Unelected*. Cambridge University Press.

Weinstein, David (2010) Interpreting Mill. In, *John Stuart Mill and the Art of Life*. (Eds Ben Eggleston, Dale Miller & David Weinstein) pp 44-73.

White, Peter A (2000) Causal Attribution and Mill's Methods of Experimental Inquiry. *British Journal of Social Psychology*. 39 (3) 429-447.