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UNIVERSAL PRESCRIPTIVISM REVISED; or: THE ANALYTICITY OF THE GOLDEN RULE

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Resumo: *Para Hare, uma frase deôntica, usada como um juízo de valor, é prescritiva na medida em que implica o imperativo correspondente; contudo, a definição de implicação lógica usada por Hare é incorrecta. É possível melhorar esta definição dentro da linha de pensamento de Hare; mas, nesse caso, verifica-se que a implicação, por parte de um juízo 'devo' — do tipo adequado, de um imperativo não é uma consequência lógica mas aquilo a que se poderia chamar uma implicação 'catapragmática'. Contudo, é possível convencermo-nos de que um juízo deôntico implica também o correspondente juízo intencional de uma outra forma, a saber, 'pragmaticamente'. Este facto apresenta-se como uma base promissora para uma variante mais eficiente do prescritivismo universal; pois existe uma relação íntima entre a implicação lógica e a pragmática que nos permite construir uma paráfrase formal de um juízo deôntico e derivar dela, através daquilo a que gostaria de chamar um cálculo pragmático-bulético da dedução natural, a contra-parte formal de um enunciado 'tenho a intenção de' —. Nesta base, é possível mostrar que uma reconstrução deôntica muito genérica da regra de ouro ('Se não aprovo o comportamento de alguém, tenho a obrigação moral de não me comportar assim') é analiticamente verdadeira.*

Summary: *For Hare, an 'ought'-sentence which is being used as a value--judgement is prescriptive in that it entails the corresponding imperative; however, Hare's definition of entailment, i. e., logical implication, is inadequate. An improvement of this definition along Hare's lines is possible; but then the implication, by an 'ought'-judgement of the relevant sort, of an imperative turns out to be not entailment but what may be called 'catapragmatic' implication. However, we can convince ourselves that a relevant 'ought'-judgement also implies the corresponding 'I intend'-statement in yet another way, namely, 'pragmatically'. This fact proves to be a promising basis for a more efficient variant of universal prescriptivism; for there is an intimate relation between pragmatic and logical implication which enables us to construct a formal paraphase of a moral 'ought'- -*

judgement and to derive from it, in what I propose to call a pragmatic-buletic calculus of natural deduction, the formal counterpart of an 'I intend'-statement. On this basis it is also possible to show that two highly general deontic reconstructions of the golden rule, viz., 'If I disapprove of someone's behaviour, I [everybody] morally ought not to behave like this', are analytically true.

1. Why Hare's universal prescriptivism needs revision

1.1. In a great number of papers, but especially in his three books on *The Language of Morals* (1952), *Freedom and Reason* (1963), and *Moral Thinking* (1981), Richard M. Hare has developed a system of metaethics to which he often refers 'as "universal prescriptivism" — a combination, that is to say, of universalism (the view that moral judgements are universalizable) and prescriptivism (the view that they are, at any rate typically, prescriptive)'. [1]

As to the first view — the view that moral judgements are universalizable —, he emphasizes that it is not a moral but a logical thesis, universalizability being a feature that moral judgements share with descriptive (and also with aesthetic) judgements: 'by calling a judgement universalizable I mean only that it logically commits the speaker to making a similar judgement about anything which is either exactly like the subject of the original judgement or like it in the relevant respects. The relevant respects are those which formed the grounds of the original judgement.' [2] To this I fully subscribe.

I further subscribe to Hare's view that moral judgements are, 'at any rate typically', [3] prescriptive. We disagree, however, in the question of how to interpret the prescriptivity of moral 'ought'-judgements. For Hare, an 'ought'-sentence which is being used as a genuine value-judgement, i.e., as a judgement by means of which someone gives utterance to one of his very own deontic attitudes, is prescriptive in that it entails the corresponding imperative; [4] and in order to be able to speak of entailment

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[1] Hare 1963: sect. 2.5, p. 16.

[2] Ibid.: sect. 8.2, pp. 139-140, cf. sect. 2.2, p. 11.

[3] For exceptions, see esp. Hare 1952: sect. 7.5; 1963: sect. 10.2; 1981: sect. 3.7 ('inverted-commas' use, 'conventional' use, etc.), and Hoche 1983: sect. 2.4-6.5; 1992: p. 234 fn. 313 (judgements of moral permission).

[4] Hare 1952: sect. 11.1-3. Since, in English and many other current languages, there are no natural imperative forms for the first person singular and the third person, Hare uses instead such forms as typified by 'Let me [him; etc.] do so-and-so' (cf. the general form of sentence (24) in sect. 2.4, below), thus extending the use of the customary first person plural form 'Let us do so-and-so.'. See, esp., Hare 1963: sect. 4.3.

even in the case of imperatives, which lack a truth-value, Hare has to devise a special definition of entailment, which runs as follows: 'A sentence P entails a sentence Q if and only if the fact that a person assents to P but dissents from Q is a sufficient criterion for saying that he has misunderstood one or other of the sentences.' [5] This definition, however, I take to be inadequate.

1.2. My reason for thinking so is simply that an adequate definition of entailment, i.e., logical implication, ought to do justice to the different sorts of implication that have been distinguished so far, viz., logical implication, pragmatical (or Moore's) implication, catapragmatical implication, and presupposition. Take, e.g., a case of Moore's paradox, say,

(1) My wife deceives me, and [but] I don't believe that my wife deceives me.

To say so is utterly strange and unacceptable, but it is not self-contradictory; for, as Moore remarked in a similar case, 'it may quite well be true': [6] What is stated by (1) *may be* true, for saying

(2) It is possible that my wife deceives me and that I don't believe that may wife deceives me.

is true if (2) is taken in the counterfactual, or objective, sense of

(3) I can conceive of a (counterfactual) situation ['possible world'] in which my wife deceives me and (in which) I don't believe that my wife deceives me.

Now, if a case of Moore's paradox, such as (1), is not self-contradictory, a sentence like

(4) My wife deceives me.

does not entail, or logically imply, a sentence like

(5) I believe (that) my wife deceives me. [7]

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[5] Hare 1952: sect. 2.4, p. 25; cf. sect. 11.3, p. 172.

[6] Moore 1944: p. 175.

[7] This is clear from daily life, but also, e.g., from what Robert von Ranke Graves, in his well-known historical novels *I Claudius* and *Claudius the God*, reports about the Roman emperor Claudius and his wife Messalina.

On Hare's definition of entailment, however, the contrary must be the case; for if some husband, on the occasion, say, of carefully and seriously answering a questionnaire, assents to (4) but dissents from (5), it is evident that he does not properly understand at least one of the two sentences in question. So we have to conclude that Hare's definition of entailment is inadequate.

1.3. Since philosophical criticism should always be constructive, we ought to try and find a definition of logical, and other sorts of, implication which, too, do not preclude in advance the possibility of extending these concepts to the field of sentences lacking a truth-value, such as imperative sentences. In the light of what Moore has said on the possible truth of paradoxes of the kind named after him,[8] the following choice seems to be both plausible and fertile:

D-1: If a sentential combination of the form 'p and not q' — not, however, the corresponding combination of the form 'Not p and not q' — does not square with my idiolectic competence (in the sense of my being unable to imagine a situation in which I would seriously use it as it stands, i.e., without any additions), there are exactly three possibilities concerning the corresponding sentence of the modally expanded form 'It is (counterfactually) possible that p and (that) not q': The modally expanded form is either true or nonsensical or false. If it is *true*, let us say that the original combination is *pragmatically inconsistent* (a case of Moore's paradox), and that the sentence abbreviated by 'p' *implies* the sentence abbreviated by 'q' *pragmatically*. If it is *nonsensical*, i.e., incompatible with the rules of depth or surface grammar, let us speak, in a corresponding manner, of *catapragmatic inconsistency* and *catapragmatic implication*. And if it is *false*, let us speak of *logical inconsistency* (or self-contradiction) and *logical implication* (or entailment), respectively. — If, however, both the combination of the form 'p and not q' and the combination of the form 'Not p and not q' conflict with my linguistic competence (in the precise sense given above), we have a case of what linguists, and philosophers of language, call *presupposition*.[9]

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[8] See above, sect. 1.2 with fn. 6.

[9] For further details and some necessary qualifications, see Hoche 1992: sect. 1.5-1.12. In sect. 1.11 of this book, and in all of its predecessors (Hoche 1981; 1990: sect. 8.3; Hoche/Strube 1985: pp. 121-125), I added to this definition (or criterion) a second one, K-2, in order to distinguish, in the case of logical implication, the 'semantic' variant, which

1.4. If we accept this fourfold definition, what is the relation between an 'ought'-sentence which is being used as a genuine value-judgement, and the corresponding imperative, or command? Take, e.g., the 'ought'-sentence

(6) You ought to do it.,

the imperative

(7) Do it.,

and, following D-1, the combination

(8) You ought to do it, and do not do it.

To be sure, there are several senses of (8) in which this combination does not oppose to our (or, more precisely: to respectively my) [10] linguistic competence; but let us think of a case in which it does, i.e., of an utterance of (8) the first part of which serves the purpose of expressing a deontic attitude of the speaker himself. A case of presupposition is out of the question; for the combination

(9) It is not the case that you ought to do it, and do not do it.

is obviously in order. So let us construct the modally expanded form

(10) It is (counterfactually) possible that you ought to do it and (that) do not do it.

To say so would evidently go against the surface grammar of English; so (10) is nonsensical. If we replace the 'primary performative' (7) by its 'explicit' counterpart [11]

(11) I hereby ask you to do it.,

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alone comes into play here, from a 'mathematical' variant. However, since this distinction is not taken very seriously in contemporary philosophy, I hope the present reader will not miss it. On the other hand, K-1, i.e., the version of D-1 in section 1.11 of that book, takes no explicit account yet of presupposition; and in the preceding publications just mentioned, as well as in 1995a: sect. II, I availed myself of an even simpler criterion, excluding the catapragmatic case by simple grammatical considerations.

[10] See Hoche/Strube 1985: pp. 109-113, 145-147; Hoche 1990: pp. 141-142, 146, 148; 1992: Subject Index s.v. 'Phantasie- und Idiolekt-Kompetenz'.

[11] See Austin 1962: Lecture VI, esp. p. 69.

the result is nonsensical, too, though at first sight the modally expanded combination

(12) It is (counterfactually) possible that you ought to do it and (that) I do not hereby ask you to do it.

might seem to be unobjectionable. A closer scrutiny would show us, however, that (12) offends against a rule of depth grammar. [12] So in any case the relation between an 'ought'-statement in the relevant (i.e., evaluative or action-guiding) sense and the corresponding imperative is not entailment, or *logical* implication, but *catapragmatic* implication.

1.5. Now of course we might consider this to be only a trifling objection against, or amendment of, Hare's approach; for his metaethical theory of deontic reasoning — his theory of what he likes to call 'golden-rule' arguments [13] — can be easily adjusted to the new conception, or so it seems at least.

However, I think there are three reasons why we should not content ourselves with such a minor revision of universal prescriptivism. First, Hare's theory of 'golden-rule' arguments, in the form he has given to it himself, does not work, for at least it is indispensable to start, not from a hypothetically chosen 'ought'-statement of the form which Hare has proposed, but from its very contrary. [14] Second, it seems to me to be highly problematic to transfer Popperian falsificationism, as Hare needs must do, from metascience to metaethics. [15] Third (and this reason I take to be of the greatest import), Hare's novel implicational approach to the theory of moral reasoning can be made considerably more fertile by a slight change in the concept of prescriptivity: If we define the prescriptivity of a relevant 'ought'-judgement, i.e., of an 'ought'-sentence which is being used as a genuine value-judgement, not by means of the *catapragmatic* implication of the corresponding *command*, but by means of the *pragmatic* implication of the *'sincerity condition'* of the corresponding command, viz., the corresponding *'I want'*-or *'I intend'-statement*, [16] we are given the opportunity, hitherto unexpected, of unfolding the precise internal structure of the concept of moral obligation. A piece of deontic reasoning then turns

[12] See Hoche 1990: sect. 8.4; 1992: sect. 1.10, pp. 83-85; 1995b.

[13] See, esp., Hare 1963: ch. 6.

[14] See Hoche 1983: esp. sect. 8.1-4; Kese 1990.

[15] See Hoche 1978; cf. 1978/1982: sect. IX, and Kese 1990: sect. 3.1.

[16] See Searle 1969: sect. 3.4, esp. p. 66.

out to be, not a falsificational 'golden-rule' argument (which in any case, as I said, is highly problematic for more than one reason), but a straightforward deduction of the verificational type. Moreover, the new conception of the prescriptivity of 'ought'-judgements opens up a way of showing that the golden rule, at least in its more universal versions, is an analytical truth (which well accounts for its ubiquity, unexplainable, as historians of religion assure us, by mere historical transmission). [17]

2. The prescriptivity of 'ought'-judgements: A new conception

2.1. The next thing to do is, of course, to show that an 'ought'-judgement of the relevant sort, i.e., one by means of which somebody gives utterance to one of his very own deontic convictions, in fact implies the corresponding 'I want'-or 'I intend'-statement pragmatically in the sense of D-1. [18] In order to do so, we have to ask ourselves, [19] first, whether we can conceive of a situation in which we would seriously use, without any additions, a sentential combination like

(13) You ought to do it, and I do not want [intend] you to do it.;

second, whether we can accept a partially negated combination of that ilk, such as

(14) It is not the case that you ought to do it, and I do not want [intend] you to do it.;

third, what to say about the pertinent modal expansion of (13), namely,

(15) It is (counterfactually) possible that you ought to do it and (that) I do not want [intend] you to do it.

Now the last two questions are easily to be answered: Saying such a thing as (14) is a matter of course; and saying something like (15) amounts

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[17] See Philippidis 1929: p. 96; Hoche 1992: sect. 1.4, pp. 49-50; sect. 4.6; sect. 4.8, pp. 294-295.

[18] See above, sect. 1.3.

[19] Or, more precisely: each reader has to ask him- or herself. See above, sect. 1.3 and 1.4 with fn. 10.

to uttering a truth in each and every interpretation of 'it' which makes the elementary sentences

(6) You ought to do it.

and

(16) I want [intend] you to do it.

admissible, i.e., meaningful; for I can always imagine a situation in which someone, according to the deontic standards I myself uphold in that situation, morally ought to do something although I, in that very same situation, do not intend him to do it (because, e.g., I do not believe that the relevant circumstances releasing, so to say, the actual moral obligation in question are given).

Consequently, in the sense of D-1, the sentential combination (13) is pragmatically inconsistent, and the 'ought'-sentence (6) pragmatically implies the 'I intend'-sentence (16) — *provided*, of course, that we have to answer the first of our three questions in the negative, i.e., that (13) does not square with respectively my idiolectic competence (in the sense indicated in D-1).

2.2. This remaining question, concerning the acceptability of (13), is not so easily to be coped with. Elsewhere, in the discussion of the German counterpart of (13), I have taken pains to show, through all three grammatical persons possibly appearing in the first half of such a combination, i.e., in an 'ought'-sentence of type (6), that, at least according to my own personal imaginative and idiolectic competence, we cannot properly utter such a combination unless the component word 'ought' is taken to be devoid of prescriptive force.[20] Here, however, I should like to take a short cut, adopting a hint of Hare's and making the problem 'a matter of definition':[21] It is true that we often use a sentential combination like (13) — frequently, and more idiomatically, with 'but' inserted instead of 'and'—, but in these cases the first part of the combination, i.e., something like (6), is taken to mean, for instance, something like

(17) It would be wise [useful; advantageous; etc.] for you to do it.

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[20] See Hoche 1992: esp. sect. 2.2-2.6, 4.7.

[21] See Hare 1952: sect. 11.2, p. 168; cf. also pp. 164, 172.

or, say,

(18) You ought, according to public opinion [the law; etc.], to do it. [22]

However, it seems to me to be equally clear that in certain types of discourse we would be strongly inclined to take objection to uttering (13); and in exactly these cases, I should like to suggest, let us say that (6) is being used with its full prescriptive force, amounting to something like

(19) According to my deontic standards you are morally obligated [under a moral obligation] to do it. [23]

Of course, I have to leave it to each single one of my readers whether he or she can agree, as for the point in question, to my personal imaginative and idiolectic competence; and whoever, having considered all facets of the matter, thinks that he or she must dissent, [24] would be well advised, as far as the metaethical theory of 'ought' and moral obligation is concerned, to part company with me.

2.3. Hopefully presuming that none the less some of my readers see themselves in a position to go on reading this paper, I shall try now and draw a number of consequences from the result reached so far. Generalized in an appropriate manner, this result may be stated as follows: If and only if by uttering a sentence of the form

(20) z_o (morally) ought to do a_o.

we mean to say something like

(21) According to my very own deontic standards, or normative convictions, z_o is under a moral obligation to do a_o.,

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[22] This might be a case of Hare's '*inverted-commas*' or of his '*conventional*' use of 'ought'; see above, sect. 1.1 with fn. 3.

[23] It is controversial among English speaking moral philosophers to what extent 'ought'-sentences can be paraphrased in terms of 'obligation', and *vice versa*. I cannot discuss this matter here; but see Hoche 1992: p. 302 fn. 424 for pertinent literature.

[24] That is, whoever cannot possibly imagine a speech act situation in which it would be all right to utter either (6) or the negation of (16), but definitely odd, or absurd, to utter both of them in the same breath, i.e., in a 'but'-or 'and'-combination like (13).

we have to say, following D-1, that a corresponding combination of the form

(22) z_o (morally) ought to do a_o, and [but] I do not want [intend] z_o to do a_o.

is pragmatically inconsistent and that a judgement of form (20) pragmatically implies a judgement of the form

(23) I want [intend] z_o to do a_o.

2.4. In what respect has this result an advantage over Hare's, according to which, if we revise it as slightly as possible, a judgement of form (20) catapragmatically implies an imperative of the form

(24) Let z_o do a_o.?

The advantage lies, I think, in the fact that, first, there is a special relationship between pragmatic — not, however, catapragmatic — and logical implication; that, second, this relationship permits us to expand logical calculi into what I shall call pragmatic calculi, i.e., calculi the basic concept of which is not truth but something like 'correct [justified; warranted] assertibility'; [25] that, third, by means of such a calculus we can construct, for every 'ought'-sentence of ordinary language which is being used as a fully prescriptive judgement, a formal language paraphrase; and that, fourth, the construction of such paraphrases allows us to gain an insight into the internal structure of moral 'ought'-judgements, into the deductive nature of deontic reasoning, and into the analyticity of certain generalized versions of the golden rule.

3. The internal structure of moral 'ought'-judgements

3.1. Let us, first, convince ourselves of the intimate relation between pragmatic and logical implication. This relation holds at least as far as the 'sincerity-condition' type of pragmatic implication is concerned. By this type I understand the pragmatic implication, by a given judgement, of an expression of its speech act theoretical sincerity condition. [26] As

[25] See, e.g., Dummett 1969: esp. pp. 363, 365, 370-371.

[26] See above, sect. 1.5 with fn. 16.

this condition, in all cases relevant to the present investigation, consists in either a belief or an intention of the speaker,[27] in what follows I shall sometimes refer to the 'sincerity-condition' type of pragmatic implication as 'doxastic-buletic' implication.[28] Taking a classical case of Moore's paradox, such as (1), we can easily see that, pursuant to D-1, sentence

(4) My wife deceives me.,

if it is being used with assertive force,[29] pragmatically implies the expression of its sincerity condition, namely,

(5) I believe (that) my wife deceives me.[30]

Similarly, sentence

(6) You ought to do it.,

if it is being used with prescriptive force, pragmatically implies the expression of its sincerity condition, namely,

(16) I want [intend] you to do it.[31]

Now, if we prefix to sentences (4) and (6) the doxastic operator 'I (strongly) believe (that)', the resultant sentences imply sentences (5) and (16), respectively, not pragmatically but logically, as we may see by applying D-1 again. Let me briefly indicate this in the 'ought'-case: The combination

(25) I (strongly) believe (that) you ought to do it, and I do not want [intend] you to do it.

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[27] See Searle 1969: sect. 3.1 and 3.4, esp. pp. 66-67.

[28] From Greek 'doxázo' = 'I believe [etc.]' and 'boúlomai' = 'I intend, want, will [etc.]'.

[29] The concept of 'assertive force' ('behauptende Kraft'), which is pivotal in Frege's philosophy of language, has been generalized, by J. L. Austin, into the basic concept of contemporary speech act theory, namely, 'illocutionary force'.

[30] See above, sect. 1.2-1.3.

[31] See above, sect. 2.1-2.3.

obviously does not fit in with my idiolectic competence in all (and only those) cases in which combination (13) does not; the partially negated combination

(26) I don't believe you ought to do it, and I do not want [intend] you to do it.

is quite a natural thing to say; and the modally expanded statement

(27) It is (counterfactually) possible that I (strongly) believe (that) you ought to do it and (that) I do not want [intend] you to do it.

seems to me to be, in every admissible interpretation, a falsehood, since I cannot conceive of a 'possible world' in which I do not intend somebody to do something which, in this world, I strongly believe him to be under a moral obligation to do. So, following D-1, we have to admit that

(16) I want [indend] you to do it.

is *pragmatically* implied by

(6) You ought to do it.

but *logically* implied by its doxastically prefixed counterpart

(28) I (strongly) believe (that) you ought to do it.

As I mentioned already in section 2.4, above, there ist *no* analogous relation between catapragmatic and logical implication: Although the imperative

(7) Do it.

is, pursuant to D-1, catapragmatically implied by (6), it is not logically, but again catapragmatically, implied by its doxastically prefixed counterpart (28); for saying

(29) It is (counterfactually) possible that I (strongly) believe (that) you ought to do it and (that) do not do it.

violates an elementary rule of English syntax, or surface grammar, and thus exemplifies a sort of nonsense.

3.2. Returning now to the sentences

(6) You ought to do it.

and

(28) I (strongly) believe (that) you ought to do it.,

we can see, of course, that these two sentences are by no means logically equivalent; for when being uttered in any admissible interpretation of the wording of (6), one of them may be true and the other one false.[32] However, (6) and (28) may be characterized as being pragmatically equivalent; for whenever someone is, according to speech act theory, justified in uttering (6), he or she is, of course, equally justified in uttering (28), and *vice versa*. More generally speaking we may say that any sentence 'φ' is pragmatically equivalent to a corresponding sentence of the form

(30) I (strongly) believe that φ.,

which, for the purposes of formalization and regimentation, I shall abbreviate by

(30') (Be) φ.[33]

On the basis of this result, we may conceive the idea of what I propose to call a pragmatic (or, more precisely speaking, a doxastic-buletic) derivation in a system, or calculus, of natural deduction.[34] Let us say that a formalized sentence 'q' is derivable, not in a logical but in a pragmatic (or doxastic-buletic) way, from a formalized sentence 'p' if and only if it can be derived from 'p', not by means of more or less generally accepted logical derivation rules alone, but by means of such rules and the addi-

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[32] Think, e.g., of a situation of the kind outlined above in sect. 2.1.

[33] Cf. Hintikka 1962: sect. 1.5. The symbol 'B' stands for 'believe(s)', and 'e' for 'ego', i.e., the respective speaker. Formula (30') is regimented in that it is to be used only on the condition that I, the respective speaker, am really *convinced*, or feel *certain*, that the state of affairs symbolized by 'φ' obtains, and that I am well *aware* of this strong belief.

[34] This idea is an extension of the well-established concept of a logical derivation in a calculus of natural deduction, by which logicians understand one that makes use, not of axioms, but only of transformation rules; see, e.g., Haack 1978: sect. 2.3, pp. 19-20, and sect. 4.2 of the present paper.

tional pragmatic rule that, on any one step (or line) of the derivation, we may prefix the doxastic operator '(Be)' to any sentence 'φ' occurring already on an earlier step (or line) of the derivation.[35] The rationale of this definition is, of course, that anyone who is in a position to assert 'φ' is also in a position to assert '(Be) φ', which is due to the fact that any sentence 'φ', according to D-1, pragmatically implies the corresponding sentence '(Be) φ'.[36]

3.3. What we are aiming at now is constructing a pragmatic derivation which mirrors in a formal way ('syntactically') what we have, in sections 2.1-2.3, found out in an informal way ('semantically', or in this case rather: 'pragmatically'), namely, that any 'ought'-judgement of form (20), if it amounts to saying something like (21), pragmatically implies the corresponding 'I want'- or 'I intend'-judgement of form (23). In other words, we have to look for a formalized counterpart — let us call it (20') — of the ordinary language sentential form

(20) z_o (morally) ought to do a_o.

from which we can derive pragmatically a formalized and regimented counterpart of the ordinary language sentential form

(23) I want [intend] z_o to do a_o.,

say,

(23') (We) $D_o z_o a_o$.[37]

If we see to it that the formalized sentential form looked for, i.e., (20'), is as simple as possible but, at the same time, as elaborate as is necessary to take account of everything that, according to D-1, is implied, logically or however else, in an ordinary language sentence of form (20), we may regard (20') as indicating the internal structure of (20), or the conceptual nature of moral obligation.

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[35] This is definition (D 3) in Hoche 1992: sect. 2.8.

[36] This statement is, of course, an attenuation, possibly less controversial, of my claim that 'φ' and '(Be) φ' are always pragmatically equivalent.

[37] Formula (23') is regimented in that we confine its use to cases in which I, the respective speaker, do not merely wish but seriously *intend* (someone) to do something, and in which I am well *aware* of this serious intention.

3.4. Now of course in a paper of a duly limited length I cannot answer in detail the question of what sentential forms are implied, in whatever way provided for by D-1, by the sentential form (20). [38] Suffice it to say that by applying D-1 to (20) we may convince ourselves that this sentential form logically implies, first,

(31) Whoever is (in the relevant respects) like z_o (morally) ought to do a_o. [39]

(so that Hare's 'logical thesis' of the universalizability of moral 'ought'-judgements [40] is fully justified in the light of the present method), and, second,

(32) There is someone, y, who has a true (objective) interest in z_o's doing a_o.

So we may expect that we have to quantify over 'interested' persons *y*, over 'acting' persons *z*, and over actions *a* that stand to each other in some triadic relation, say, P_o. This heuristic consideration, in connection with a lot of others I have to omit here, makes it plausible that the simplest possible version of the sentential form looked for is

(20') (We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & (Ey) $P_oyz_oa_o$,

which may be read as follows: 'I want [intend], for all persons *y*, all persons *z*, and all actions *a*, *z* to do *a* if *y* stands in relation P_o to *z* and *a*; and there is some person *y* who stands in relation P_o to z_o and a_o.' [41]

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[38] I have taken pains to do so, however, in Hoche 1992: chs. 2-3.

[39] Alternatively, we may say instead: 'Whoever is (in the relevant respects) like z_o (morally) ought to do an action which is (in the relevant respects) like a_o.'. However, I take the symbol 'a_o' to stand, not for an action-*event*, but for an action-*type*. Cf. Hoche 1992: sect. 3.5.

[40] See above, sect. 1.1 with fn. 2.

[41] This semi-ordinary language reading makes it clear that, in formula (20') and in what follows, the symbol '(y,z,a)' is an abbreviation of the three consecutive universal quantifiers '(y)(z)(a)'; that '(E...)' serves as my existential quantifier; and that the sentential connectives '→' and '&', respectively, stand for the ('material') implication and the conjunction of the sentential calculus. Later on, I shall also use the sentential negator '¬' and the abbreviation '(Ey,z,a)', meaning '(Ey)(Ez)(Ea)'. As for the dots in formula (20'), the supposed colon and the supposed full stop are to function as brackets and parentheses, respectively. Furthermore, I shall have to make use of a group of three dots —':.' —, doing

As we can easily see, sentence [42] (20') is a simple conjunction of a universal 'I want'- or 'I intend'-sentence — a principle of respectively my own willing concerning all cases of a given kind — and a factual sentence functioning as a 'boundary condition'. It may be aptly illustrated by our common moral intuition that promises ought to be kept: 'I want [intend], for every promisee y, for every promiser z, and for every action a, z to do a if all of the following conditions are fulfilled: z has promised y to do a, and z is able to do a, and it is in y's true interest that z does a, and if it is in someone's true interest that z *omits* doing a this interest does not outweigh y's interest in z's doing a; and there is some promisee y such that all of the following conditions are fulfilled: z_o has promised y to do a_o, and z_o is able to do a_o, and it is in y's true interest that z_o does a_o, and if it is in someone's true interest that z_o *omits* doing a_o this interest does not outweigh y's interest in z_o's doing a_o.'

4. The idea of a pragmatic-buletic calculus, and a derivation in it

4.1. Postponing, for a moment, the important question of how to convince oneself that one really advocates a given principle of respectively one's own universalized wanting, intending, or willing, I am going to prove now, by means of an extended calculus of natural deduction, that we may, from

(20') (We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & (Ey) $P_oyz_oa_o$,

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duty for a pair of braces. The scope of a group of n dots is regarded as being closed when another group of n or more dots is reached (otherwise at the end of the formula). So a more explicit, but also clumsier, version of (20') would run like this: '(We) [(y)(z)(a) ($P_oyza \rightarrow D_oza$)] & (Ey) $P_oyz_oa_o$'. For more details, see Hoche 1992: pp. 155-156 fn. 217, and the closely related conventions in Whitehead/Russell 1910: Introduction, ch. I, pp. 9-11 ('The use of dots'); Lewis/Langford 1932: Appendix I ('The use of dots as brackets'). — It might seem more proper to replace, in formula (20'), the relational constant 'P_o' by a relational variable 'P', prefixing, to the whole formula, the second order existential quantifier '(EP)'. However, I think that this procedure is neither necessary nor uncontroversial: It is not necessary because someone seriously uttering (20) or (20') commits himself to indicate, on request, the reason for his judgement, i.e., the relation P_o; and it is not uncontroversial because of the intricate logical phenomenon known as 'quantifying into' non-extensional contexts. Cf. Hoche 1992: sect. 2.10.

[42] Strictly speaking, (20') is, because of the occurrence of the schematic letters 'P_o', 'z_o', and 'a_o', a sentential form; but in the present context the difference is of no import, and so I shall speak, for the sake of simplicity, of 'sentences'.

pragmatically derive

(23') (We) $D_oz_oa_o$.

4.2. As the basis for, or unextended core of, my extended calculus I shall adopt a somewhat simplified version of a natural deduction system for first order logic which is well established already, namely, of the system presented by Benson Mates in his *Elementary Logic*.[43] By a 'derivation' in his natural deduction system, Mates understands 'a finite sequence of consecutively numbered lines, each consisting of a sentence together with a set of numbers (called the *premise-numbers* of the line), the sequence being constructed according to the following rules (in these statements φ and ψ are arbitrary formulas, α is a variable, and β is an individual constant):

P (Introduction of premises) Any sentence may be entered on a line, with the line number taken as the only premise-number.

T (Tautological inference) Any sentence may be entered on a line if it is a tautological consequence of a set of sentences that appear on earlier lines; as premise-numbers of the new line take all premise-numbers of those earlier lines.

C (Conditionalization) The sentence $(\varphi \rightarrow \psi)$ may be entered on a line if ψ appears on an earlier line; as premise-numbers of the new line take all those of the earlier line, with the exception (if desired) of any that is the line number of a line on which φ appears.

US (Universal specification) The sentence $\varphi\alpha/\beta$ may be entered on a line if $(\alpha)\varphi$ appears on an earlier line; as premise-numbers of the new line take those of the earlier line.

UG (Universal generalization) The sentence $(\alpha)\varphi$ may be entered on a line if $\varphi\alpha/\beta$ appears on an earlier line and β occurs neither in φ nor in any premise of that earlier line; as premise-numbers of the new line take those of the earlier line.

E (Existential quantification) The sentence $(E\alpha)\varphi$ may be entered on a line if $\neg(\alpha)\neg\varphi$ appears on an earlier line, or vice versa; as premise-numbers of the new line take those of the earlier line.

[43] Mates 1965.

A derivation in which a sentence φ appears on the last line and all premises of that line belong to a set of sentences Γ is called a *derivation (or proof) of* φ *from* Γ.' [44]

In addition to the 'basic rules' just cited, Mates introduces three useful 'short-cut rules', namely, EG (Existential generalization), ES (Existential specification), and Q (Quantifier exchange). [45] Of these, for the derivation at hand only ES is of help; but I should like to replace it, for the sake of simplicity and contrary to an objection suggested by Mates, [46] by the following short-cut rule:

S (Skolemization) The sentence φα/ς may be entered on a line if (Eα)φ appears on an earlier line — provided, however, that ς (the 'Skolem constant') does not yet appear on an earlier line, and that it disappears, on one of the following lines, by means of any one rule except UG; as premise-numbers of the new line take those of the earlier line. [47]

4.3. To the derivation rules given in section 4.2, we have to add, of course, the pragmatic rule mentioned in section 3.2; for what we are aiming at is a *pragmatic* derivation of (23') from (20'). The following formulation seems to me to be appropriate:

R_p (Pragmatic rule) The sentence (Be)φ may be entered on a line if φ appears on an earlier line; as premise-numbers of the new line take those of the earlier line.

It is obvious, however, that we have also to add one or more rules specifying the relevant relations between the doxastic operator '(Be)' and

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[44] Ibid.: sect. 7.1, pp. 112-113. To each of the rules T and UG, Mates adds the following explanatory foot-note: '... to say that a sentence φ appears on a line is to say that the line consists of φ and a set of numbers; to say that a sentence φ is a premise of a given line is to say that φ appears on a line numbered by a premise-number of the given line.' — In rule E, I have slightly changed the original forms of the existential quantifier and the sentential negator.

[45] Ibid.: sect. 7.3.

[46] Ibid.: sect. 7.3, p. 122.

[47] The leading idea behind this rule may be aptly stated like this: 'Instead of saying that there exists an object with a certain set of properties, one can create a name for one such object and simply say that it has the properties': Clocksin/Mellish 1981: sect. 10.2, p. 226. — A reader suspicious of S and conversant with Mates' ES should, of course, make use of the latter.

the — 'buletic' — operator '(We)' occurring in (20') and (23'). In fact, we shall need two different detachment rules (*modus ponens* rules) for a comprehensive logic of willing (buletic logic) which contains, as a proper part, a logic of believing or conviction (doxastic logic).[48] Here they are:[49]

$R_{bd}1$ (First buletic detachment rule) The sentence (Wi)ψ may be entered on a line if the sentences (Wi) . $\varphi \rightarrow \psi$ and (Bi)φ appear on two earlier lines; as premise-numbers of the new line take all those of the two earlier lines.

$R_{bd}2$ (Second buletic detachment rule) The sentence (Wi)ψ may be entered on a line if the sentences (Bi) . $\varphi \rightarrow \psi$ and (Wi)φ appear on two earlier lines; as premise-numbers of the new line take all those of the two earlier lines.

It is true that detachment rules are controversial in any extended[50] logic, notably in doxastic logic;[51] but none the less I think we are fully justified in making use of the two buletic detachment rules just stated, and this for the following reasons (which I can only sketch here):[52] According to D-1 in section 1.3, above, a sentence like

(33) He wants [intends] her to lie to me.

is logically implied not only by

(34) He wants [intends] her to lie to me if otherwise I wouldn't buy his house, and he (strongly) believes that otherwise I wouldn't buy his house.,

but also by

(35) He (strongly) believes that I won't buy his house unless she lies to me, and he wants [intends] me to buy his house.;

and pursuant to the sentential calculus, the logical form of the first half of (35), namely, '(Bi) . $\neg \psi \rightarrow \neg \varphi$', is equivalent to '(Bi) . $\varphi \rightarrow \psi$', which

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[48] As far as I know, a buletic logic able to serve the purposes of the present project has not been worked out yet.

[49] In the following rules, 'i' is to stand for any individual person(s).

[50] In the sense of Haack 1978: sect. 1.2.

[51] See, e.g., Blau 1969: sect. 3.3.

[52] For a more thoroughgoing discussion see Hoche 1992: sect. 2.9, pp. 159-165, and sect. 4.1, pp. 257-258.

occurs in $R_{bd}2$. [53] Against these claims one may feel tempted to object that human willing (wanting, intending) as well as believing is often highly irrational. This is true, of course. But for all that I cannot believe that one of my philosophizing *readers* may be prepared, in any given speech act situation, consciously to dissent from (33) and to assent, at the same time, to (34) or (35), even if '*he*' — the person referred to by 'he' in these sentences — should be so irrational as to do just this. That alone is of relevance here; for what we want to know in linguistic philosophy is never what people happen to say in whatever situation, but only how to speak suitably and consistently about things, as, in the present case, about human willing (wanting, intending) and believing.

4.4. Having arrayed, in sections 4.2-3, all the transformation rules we need for the project at hand, I want to present now a derivation of (23') from (20'). This derivation is pragmatic in that we have to make use of the pragmatic rule R_p, and it is buletic in that we have to apply the two buletic detachment rules $R_{bd}1$ and $R_{bd}2$; so let us call it a pragmatic-buletic derivation. Here it is:

{1}	(1)	(We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & (Ey)$P_oyz_oa_o$	P
{1}	(2)	(We) : (y,z,a) . $P_oyza \rightarrow D_oza$	1 T
{1}	(3)	(Ey)$P_oyz_oa_o$	1 T
{1}	(4)	$P_oy_sz_oa_o$	3 S
{5}	(5)	(y,z,a) . $P_oyza \rightarrow D_oza$	P
{5}	(6)	$P_oy_sz_oa_o \rightarrow D_oz_oa_o$	5 US
Λ	(7)	(y,z,a) . $P_oyza \rightarrow D_oza$. $\rightarrow$. $P_oy_sz_oa_o \rightarrow D_oz_oa_o$	5,6 C
Λ	(8)	(Be) : (y,z,a) . $P_oyza \rightarrow D_oza$. $\rightarrow$. $P_oy_sz_oa_o \rightarrow D_oz_oa_o$	7 R_p
{1}	(9)	(We) . $P_oy_sz_oa_o \rightarrow D_oz_oa_o$	2,8 $R_{bd}2$
{1}	(10)	(Be) $P_oy_sz_oa_o$	4 R_p
{1}	(11)	(We) $D_oz_oa_o$	9,10 $R_{bd}1$

Let me explain this in a few words. In the first *column*, the premise-numbers of each line are indicated by the numerals appearing in set theoretic braces (in this pragmatic-buletic derivation, each line happens to have

[53] In (35), I had to make use of the 'transposition [contraposition] of implication', because otherwise our linguistic competence would have been entangled by the temporal, causal, and motivational connotations of ordinary language 'if-then'-sentences, as may be seen by looking at (35*): 'He (strongly) believes that she lies to me if I buy his house, and he wants [intends] me to buy his house.'; cf. Hoche 1992: pp. 32-33 with fn. 27 and pp. 257-258 with fn. 356.

only one premise-number); on lines (7) and (8), the symbol 'Λ' stands for the empty set of premises. In the second column, the running numbers of the lines are given by the numerals in parentheses. In the third column, the sentences themselves are written down. Finally, in the fourth column, the rules are named according to which the respective sentences have been entered, and the numeral(s) prefixed to the names of the rules indicate(s) the number(s) of the line(s) to which the rule in question has been applied. — Of the *lines*, only few, I think, need explanation. On line (1), I have entered sentence (20') according to rule P. On line (6), I have applied rule US, to the sentence given on line (5), thrice at once (formal logicians, I presume, would prefer me to do this step by step). On line (7), I have obtained, by applying rule C to the sentences on line (5) and (6), a logically true sentence, i.e., a sentence whose set of premises is empty. The sentences on lines (8) through (11) have been obtained by the three rules that make this derivation a pragmatic-buletic one. By applying rule $R_{bd}1$, on line (11), to the sentences on lines (9) and (10), we have reached the sentence we wanted to derive, namely, (23'), and at the same time we have gotten rid, as we were expected to, of the Skolem constant 'y_s' introduced on line (4).

5. Principles of willing, universal 'ought'-judgements, and the analyticity of the golden rule

5.1. Let me now return to the question left open at the beginning of section 4.1, i.e., to the question of how to convince oneself that one really advocates a subjective principle of willing, for instance the principle that, on certain conditions, everybody is to keep his promises,[54] or that, as a rule, nobody is to take away material goods from the poor.

As for the latter example, an efficient procedure is indicated in the Bible (II Sam. 12). After King David had committed adultery with Bathsheba, Nathan the prophet told him a shocking story the protagonists of which were left anonymous (which is of the greatest methodological import). In its bare outlines, or rather: reduced to its logically relevant skeleton, the story runs as follows:

(36) There are two men, *y* and *z*, and an action, *a*, such that the following conditions are fulfilled: *y* is poor and *z* is rich, and *a* is an act of a rich person's respecting the material property of a less well-to-do

[54] See above, end of sect. 3.4.

> person; and z is able to do a; and it is in y's true interest that z does a; and for every person x: if it is in x's true interest that z omits doing a this interest does not outweigh y's interest in z's doing a; and [but] it is not the case that z does a.

Let us abbreviate this story in accord with the customs of first order logic:

(36') $(Ey,z,a) : R_oyza \,\&\, C_oza \,\&\, I_oyza \,\&\, (x)\, I_1xyza \,\&\, \neg\, D_oza.$

Having heard this story, the king became furious at the rich man's behaviour, and by this strong emotional reaction he made it clear to the prophet, but no less to himself, that he wanted nobody to do what the rich man had done; or, logically speaking, that he willed, once for all, the negation of (36'), i.e.,

(37') $\neg\, (Ey,z,a) : R_oyza \,\&\, C_oza \,\&\, I_oyza \,\&\, (x)\, I_1xyza \,\&\, \neg\, D_oza.$

By means of a conventional first order calculus, for instance by the one outlined above in section 4.2, this is easily shown to be logically equivalent to

(37") $(y,z,a)\, .\, R_oyza \,\&\, C_oza \,\&\, I_oyza \,\&\, (x)\, I_1xyza \rightarrow D_oza.$

So, after his burst of anger, the king could have formulated for himself the following subjective principle of willing:

(38') We : $(y,z,a)\, .\, R_oyza \,\&\, C_oza \,\&\, I_oyza \,\&\, (x)\, I_1xyza \rightarrow D_oza.$

If we are not interested in the details of logical structure indicated by (38'), we may content ourselves with the following simpler formula, in which the four conditions specified in (38') are unified into one highly compact triadic relation:

(39') We : $(y,z,a)\, .\, P_oyza \rightarrow D_oza.$

This, however, is the form of the buletic principle contained in our sentence (20'), which, as I tried to show, is the most concise paraphrase of a prescriptive ordinary language 'ought'-judgement.[55]

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[55] Conversely, of course, we may expand (39'), whenever it occurs in (20'), into the more detailed form (38'). For our present purposes this is not necessary; but see Hoche 1992: sect. 3.8. For more details see ibid.: sect. 3.10-3.11, 4.4

5.2. Having outlined, in section 5.1, the 'Nathan-David procedure' of how to convince oneself that one really advocates a subjective principle of universal willing, I want to show now that from such a principle of willing we can easily derive, in a conventional first order system of natural deduction, what may be considered to be the logical paraphrase of a *universal* 'ought'-judgement. My derivation consists of five lines (although lines (2) and (3) could have been dispensed with):

{1}	(1)	(We) : (y,z,a) . $P_oyza \rightarrow D_oza$	P
{2}	(2)	$(Ey)P_oyz_oa_o$	P
{1,2}	(3)	(We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & $(Ey)P_oyz_oa_o$	1,2 T
{1}	(4)	$(Ey)P_oyz_oa_o \rightarrow$ (We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & $(Ey)P_oyz_oa_o$	2,3 C
{1}	(5)	(z,a) :. $(Ey)P_oyza \rightarrow$ (We) : (y,z,a) . $P_oyza \rightarrow D_oza$: & $(Ey)P_oyza$	4 UG

Here we find on line (3) our sentence (20'), i.e., the simplest logical paraphrase of a *singular* 'ought'-judgement, which is immediately seen to be derived from two premises: from the buletic principle entered on line (1), and the statement, entered on line (2), that certain morally relevant facts are given. By conditionalization, on line (4) we get rid of the second (factual) premise; and by universal generalization, carried out twice at once,[56] on line (5) we reach a sentence which may be read as follows: 'For all persons z and all actions a: If there exists a person y who stands in relation P_o to z and a, then z morally ought to do a.'[57]

From this it is clear that a 'Nathan-David procedure' is all of the evidence we need for a universal 'ought'-judgement, whereas for a singular 'ought'-judgement we also need some factual evidence.

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[56] See sect. 4.4, above, comment on line (6) of the derivation. Some readers might also expect me to symbolize the newly introduced universal quantifiers, and the variables bound by them, by means of new letters, say, 'α ' and 'ζ'. But this is not necessary; for in the buletic principle (39') contained in the sentence on line (5), the letters 'a' and 'z' do not function as free variables and so cannot possibly be bound any more by the universal quantifiers '(z,a)' at the very beginning of that sentence.

[57] As this universal 'ought'-judgement is derivable from the subjective principle of willing introduced on line (1), it is subjective, too. But the same is true, of course, of any singular 'ought'-judgement, wich is derivable from a subjective principle of willing together with a factual premise. So, according to my pragmatic-buletic approach, 'ought', or moral obligation, is never something objective. See Hoche 1992: sect. 4.8, and below, sect. 5.3.

5.3. Furthermore, a 'Nathan-David procedure' is the only non-logical basis for justifying at least the two most general versions of the old moral principle known as the golden rule. For these versions may be simply derived from a universal 'ought'-statement such as the one obtained on the last line of the derivation stated in section 5.2. To convince ourselves of this fact, let us add to this derivation three more lines:

{1}	(6)	(a) :. (Ey) $P_o$yea → (We) : (y,z,a) . $P_o$yza → $D_o$za : & (Ey) $P_o$yea	5 US
Λ	(7)	(We) : (y,z,a) . $P_o$yza → $D_o$za : → (a) :. (Ey) $P_o$yea → (We) : (y,z,a) . $P_o$yza → $D_o$za : & (Ey)$P_o$yea	1,6 C
Λ	(8)	(We) : (y,z,a) . $P_o$yza → $D_o$za : → (z,a) :. (Ey) $P_o$yza → (We) : (y,z,a) . $P_o$yza → $D_o$za : & (Ey) $P_o$yza	1,5 C

The sentence on line (7) may be read like this: 'If I advocate the P_o-principle of willing, then I morally ought to do any action a if there is some person y who stands to me and a in relation P_o.'. If we remember the Nathan-David situation, we can easily realize that this amounts to saying, in more down-to-earth words: 'If I disapprove of someone's behaviour, I morally ought not to behave like this.', or even simpler: 'What I hate being done I must not do myself.'. This, however, is nothing but a deontic reconstruction of a version of the golden rule handed down to us from Greek antiquity: 'How can we lead the best and most righteous life? By not ourselves doing that which we criticize in others.' [58]

As compared to the better known versions of the golden rule, all of which refer to the way in which I wish to be treated by others, [59] this ancient Greek version is a generalized one in that it solely mentions another one's acting in general; and the same is true, of course, of my reconstruction of it in terms of 'ought' or 'must', and, by this token, of the logical paraphrase entered on line (7). But it is possible to formulate the golden rule in an even more general way: 'If I disapprove of someone's behaviour, *everybody* morally ought not to behave like this.', or, more formally: 'If I advocate the P_o-principle of willing, then *everybody* (z) morally ought to do any action a if there is some person y who stands to him (z) and a in relation P_o.'. This, however, is the semi-ordinary language reading of the formalized sentence entered on line (8). I do not think that

[58] Thales (translated from Diogenes Laertius I.36). For more records, see Hoche 1978/1982: sect. X with fn. 18-20.

[59] See, e.g., Matthew 7:12: 'Whatever you wish that men would do to you, do so to them; for this is the law and the prophets.'

this most general version of the golden rule could be justly blamed for being immodest, although it is true that it makes respectively my principles of willing the basis, or standard, of what everybody morally ought to do. For as ought to be clear by now,[60] I take it that a genuine deontic discourse is always basically subjective, depending, in the last resort, on the subjective principles of willing advocated by each single participant in the discussion. So the one who has to answer for the moral 'ought'-judgements of a person is neither God nor society, the majority, and so forth, but only he, the person in question, himself.

Now remember that the sentences entered on lines (7) and (8), i.e., the logical paraphrases of the two most general versions of the golden rule, are logically true; for both of them have been derived from the empty set of premises, Λ. So we may say that the corresponding formulations in ordinary language — 'If I disapprove of someone's behaviour, I [everybody] morally ought not to behave like this.' — are analytically true, or true alone by virtue of what the component parts of these formulations mean. This result, reached on the basis of the pragmatic-buletic approach outlined above, accounts well for the fact that the ubiquity of the golden rule cannot be explained historically.[61] Moreover, it seems to me to fulfill Locke's demand 'to make out the truth and reasonableness' of 'that most unshaken rule of morality'.[62]

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[60] See esp. fn. 57.

[61] See above, end of sect. 1.5 with fn. 17.

[62] Locke 1690: bk. I, ch. III, sect. 4.

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