FACING JÖRGENSEN'S DILEMMA

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"Old experience teaches

The thread of consequence cannot be broken"

Ted Hughes, Tales From Ovid

As lawyers we take it for granted that legal argumentation is a rational form of argumentation. Though it differs in obvious ways from mathematical reasoning, being persuasive in nature rather than strictly logical, that persuasive force (where it is present) depends upon the rational properties of juridical argument rather than its emotive force. Our ability to engage in legal reasoning, or to assess the effectiveness of legal arguments, does not ordinarily depend upon a firm understanding of what these 'rational properties' are: the standards of rationality involved are, instead, part of the background of unarticulated assumptions and shared standards against which legal arguments are formulated and pursued. The fact that those involved with the law broadly *agree* on what makes a legal argument a sound one, or a controversial, or an insightful, or a misconceived, one is thus more important than their ability to give precise, univocal expression to the criteria which underpin those assessments.

It is, as a philosophical matter, nevertheless important that there actually be rational criteria which govern the coherence of legal argumentation. In certain branches of legal philosophy, these rational criteria are the subject of sustained analysis. On occasion, this is motivated by a desire to develop a clear picture of the structure of legal justification, and to reach a precise understanding of the principles which supply the grounds of the coherence of legal argumentation. The quest for a 'rational science of law' is, in all probability, a perennial one; but even in the absence of a complete theoretical picture of legal argumentation, many philosophers have sought principled confirmation that our intuitive judgments about the validity of certain inferences are indeed sound, and that the justificationary force of legal arguments is in the end truly rational rather than emotive, or arbitrary. One persistent source of doubt about the rational credentials of legal reasoning comes in the form of a problem known as 'Jörgensen's Dilemma'. Roughly stated, Jörgensen's Dilemma poses the following problem: whilst there is a generally accepted basis for logical inference, the explanations which establish logical validity in the case of arguments involving descriptive propositions do not appear to hold when the arguments depend partly or wholly upon normative propositions. Thus, whilst arguments involving the application of norms certainly appear to be governed by intelligible principles, there is in fact no readily available basis on which to distinguish genuinely valid normative inferences from purely arbitrary ones.

In this essay I intend to lay this question to rest, and to suggest that Jörgensen's Dilemma presents no real problem for our intuitive understandings of legal reasoning and justification. My discussion will initially centre on two established but opposing ways of looking at the dilemma, before proceeding to a more general discussion of how it might be resolved. These two parts of the discussion are relatively autonomous, and

may be read independently of one another. (Indeed, those who have little interest in technical issues about the analysis of legal reasoning can safely proceed to the second section.)

Part I: Two "Solutions"

Jörgensen's Dilemma describes a problem faced by us in relation to the proper way to regard sentences in the imperative mood:

"According to a generally accepted definition of logical inference only sentences which are capable of being true or false can function as premises or conclusions in an inference; nevertheless it seems evident that a conclusion in the imperative mood may be drawn from two premises one or both of which are in the imperative mood."

One recent attempt to tackle this problem is that of Robert Walter.² Walter develops this statement of the dilemma with two examples, adapted from Jörgensen. He asks us to contrast the syllogism

(I) All human beings will die one day.Socrates is a human being.Therefore Socrates will die one day.

with the following, "normative" syllogism:

(II) Love your neighbour as yourself!X is one of your neighbours.Therefore love X as yourself.

In the case of (I), Walter states that the conclusion is true if both antecedents are true, since "The *truth* is in a manner of speaking *carried* from the premises into the conclusion". On the other hand, the conclusion in (II) – though it appears to follow from the premises in the same way – cannot do so by our current understanding since it, like the major premise, is in the imperative mood and as such is incapable of being true or false. Therefore, truth is not transmitted across the consequence relation. This intuitively agreeable set of propositions is traditionally seen as providing a rather attractive, if frustrating, explanation of the asymmetry between (I) and (II).

Walter indeed appears to concur with the view that truth, and the ability of propositions to bear truth-value, are at the heart of the problem of the "inference" in (II): "The conclusion is, of course, subject to an important precondition. The premises must be *true*." Walter's way out of this fix is to show how, contrary to received opinion, all the propositions in (II) can be viewed as true, or at least truth-relevant. To do this, we must examine the way in which propositions are assessed as true or false in the first place. In the case of indicative sentences, the propositions they embody are valued on

¹ J. Jörgensen, "Imperative and Logic" (1937-8) 7 Erkenntnis 288-96.

² R. Walter, "Jörgensen's Dilemma and How to Face it" (1996) 9 *Ratio Juris* 168-71. (Hereinafter, 'Dilemma'.)

³ Walter, Dilemma, 169.

⁴ Id.

the basis of their relationship to the world: roughly speaking, a proposition is true iff (if and only if) it accurately describes the reality to which it is addressed, so that "Snow is white" is true if snow is white, and false otherwise.⁵ So, to overcome Jörgensen's Dilemma, one must accept that imperatives are likewise valued on the basis of their depiction of reality, this time of a "world of ought" consisting of "norms-in-themselves".⁶ Normative syllogisms may then be seen to transmit truth in essentially the same way as factual syllogisms.

Ota Weinberger takes issue with Walter's approach, on the basis of what he refers to as Walter's "ontologization" of logic:

"Walter seems to believe that the validity of an inference [even in relation to indicative sentences] is ontologically grounded, namely, on the real facts the propositions are about . . . If I refer to the view that the validity of inferences is founded on the ontological relation between the objects being described by the phrase "the ontologization of logic," then we can say that ontologization misinterprets logic theory and destroys essential functions of inferences for methodology."

Vis-à-vis the classical conception of logical consequence, Weinberger is certainly right. According to the classical definition of logical implication, sale propositions imply all propositions and true propositions are implied by all propositions; what matters for validity is, as Weinberger notes, "not the actual structure of the world the propositions are about, but the structure of the relevant linguistic expressions and their interrelations". Walter's conception of logic, by contrast, is "ontological" in that he requires a (true) conclusion – whether of fact or of value – to be validly inferred only from premises which are themselves true.

Weinberger's is not the only point which can be raised against Walter's approach: one may, quite reasonably, take exception to Walter's postulation of a "world of ought" alongside the "world of is," the latter being that with which indicative sentences are concerned, and both of which are said, by

⁵ This conception of truth is *not*, of course, Tarski's (See A. Tarski, "The Concept of Truth in Formalised Languages", reprinted in Alfred Tarski, *Logic, Semantics, Metamathematics*. (Hackett, 1933) pp 152-78.) Whereas Tarski was concerned with the relationship between a truth-predicate in an object-language and a corresponding property of the meta-language, Walter here advances a *disquotational* theory of truth with a more direct and overt ontological motivation. The philosophical controversies surrounding such a theory need not detain us; however, on the differences between such a conception and Tarski's, see W.V. Quine, *Philosophy of Logic* (Harvard, 1986) 40ff.

⁶ Walter, Dilemma, 169-70.

O. Weinberger, "Against the Ontologization of Logic: a Critical Comment on Robert Walter's Tackling Jörgensen's Dilemma" (1999) 12 Ratio Juris 96. (Hereinafter, 'Ontologization'.)

⁸ The classical definition of implication is derivable straightforwardly from the classical conception of consequence – see below for details.

⁹ Weinberger, Ontologization, 97.

Walter, to be in some sense "constructed out of sense-data". 10 Nevertheless I shall restrict discussion to Weinberger's objection for two very good reasons. In the first place, even if the rather fanciful talk in terms of "worlds" is translated into something more intuitively graspable - such as talk of distinct intellectual domains - the question which still wants answering is why we should assume that the different "worlds" (or domains, or whatever they are) are related to one another in such a way as to render norms useful as guides to everyday life: there is no *a priori* reason for supposing that any connection between Walter's "worlds" exists, beyond the fact that norms are supposed to assess behaviour. However, the latter assertion was supposed to be the outcome of Walter's explanation, not an unanalysed assumption on which the whole explanatory edifice rests. In the second place, it is exceedingly difficult to get a handle on what, exactly, the disputed points are, save by addressing the logical disputes to which they give rise. This does not involve a reduction of those disputes to disputes about logic; but if an assumption can be shown to be unable to get off the ground, logically speaking, then any further, metaphysical, debate is forestalled.

I. Walter and Weinberger

I shall try to be brief about Walter's argument and Weinberger's response to it. By ordinary lights, I think Weinberger's objection is well made. I also think that (by extraordinary lights) Weinberger's objection can be met, at least to some extent. I do not, however, believe that this remedy does Walter any good — in that it does not deliver us from the horns of Jörgensen's Dilemma — but I briefly explore it here as an interesting point in itself.

More precisely, two things need to be established: first, can Walter find an answer to Weinberger's challenge; and secondly, if an answer is available, will it enable Walter to provide a convincing explanation of why we should regard syllogism (II), above, as valid? I will attempt to show that Walter does have an answer, of sorts — albeit one which requires a very charitable interpretation of his antecedent remarks on logical consequence — but that such an answer fails to establish anything startling about the putative validity of (II).¹¹

The charitable interpretation of Walter's comments is this. Given the ordinary, classical concept of logical (material and strict) implication, and any two propositions A and B, it is hard to see why $A \Rightarrow B$ should be true simply because A is false or B true. In particular (so the argument may go) it is especially hard to see why this should be so when A, B are *imperative*

See Walter, Dilemma, 171; also Walter, "A Response to Stewart" (1997) 10 Ratio Juris) 403. Some of these problems are explored by Bruce Anderson, "A Comment on Walter" (1999) 12 Ratio Juris 100-7, at 102.

Weinberger, by contrast, is rather uncharitable in his reading of Walter: Weinberger quotes Walter as stating "The conclusion is subject to an important precondition. The premises must be true" – the locus of the logical error exposed by Weinberger. However, Weinberger's ellipsis does not capture fully Walter's intention, the full sentence reading, "The premises must be true; they must be – as the phrase goes – capable of being true" – which is rather different. I am aware that my "charitable" reading is quite liberal; this is because it seems to me that Walter's remarks taken at face value do not issue in a coherent position. (In fact it is not clear to me what Walter's intended position is at all.)

propositions, assuming that such propositions bear truth-values: one would like to think of moral, legal and other types of value-laden argument as expressing relationships between propositions which are more closely defined than mere combinations of arbitrary truth-functions. According to the classical conception, such a closer association between premises is not entertained, since B follows from A in every situation except that in which A is true and B false. On the classical conception of consequence, A and B need enjoy no intrinsic relationship with one another: A might stand for "Water is H₂SO₄" and B for "Dogs are quadrupeds", in which case $A \Rightarrow B$ would be true. Walter's point, therefore, might be that this conception of consequence does not capture the intuitive notion of consequence (as employed in chains of reasoning such as (II) above) that the premises and conclusion of an argument must be somehow linked: in other words, that the impossibility of inferring a false conclusion from true premises does not suffice for validity. On the other hand, the impossibility of true premises and a false conclusion is clearly a necessary condition of validity, so what is needed (Walter may argue) is some stronger condition of sufficiency.

If this charitable interpretation *is* Walter's position, then he would enjoy some good company, for in recent times the classical conception of logical consequence has undergone challenge on two fronts. According to the first sort of challenge, the classical conception of consequence, which is based essentially on Tarski's axiomatisation of consequence, is simply the wrong one; that is, it fails to capture our intuitive notion of consequence. Such an attack has been levelled, for instance, by John Etchemendy. It is roots lie in an asymmetry in our attitude to the soundness and completeness proofs for first-order logic. We normally regard the pair:

(*) If
$$\Sigma \models S$$
 then $\Sigma \models S$ (Completeness)
If $\Sigma \models S$ then $\Sigma \models S$ (Soundness)

as being of more significance than proofs of:

(**) If
$$\Sigma \Vdash_1 S$$
 then $\Sigma \Vdash_2 S$
If $\Sigma \Vdash_2 S$ then $\Sigma \Vdash_1 S$

where " \parallel " and " \parallel " are generalised versions of (respectively) the semantic and syntactic turnstiles. This is because the most we can claim for the notions in (**) is that they are coextensive; we cannot tell whether they are sound or complete as consequence relations on a language unless we have a semantic proof of either \parallel 1 or \parallel 2. ¹⁴ The belief attendant on this attitude is that we *know* that our semantic notion of consequence (*i.e.* Tarski's) is the right one – that it declares all logically valid arguments valid, and all invalid ones invalid. One who advances this first sort of attack is in effect suggesting that such a belief is unjustified or untenable.

¹² See J. Etchemendy, *The Concept of Logical Consequence* (1990).

For appropriate elucidations see, e.g. W Hodges, "Elementary Predicate Logic" in The Handbook of Philosophical Logic (Gabbay and Guenthner eds., 2nd ed., 2001), Vol. 1, 1-131.

This argument is roughly that of Etchemendy: see *The Concept of Logical Consequence*, 3-4.

The second sort of attack on the classical conception is, though rather different in terms of motivation, essentially a particular instance of the first sort of attack. It attacks the classical account of validity because of its allegedly unintuitive consequences – for instance that all propositions are implied by inconsistent premises. This attack locates the problem in the truth-functionality of the material conditional, the idea that $A \Rightarrow B$ can be asserted simply because A is false or B is true. In place of such a conception, it is argued, we need an intensional (*i.e.* non-truth-functional) account of the conditional corresponding to "If . . . then . . .", one in which the premises are somehow *relevant* to the conclusion. The result, of course, would be a form of *intensional logic*.

Both sorts of challenge are compatible with Walter's remarks (the first only implicitly), but it is the second which, I believe, offers Walter the most credible stance and the best chance of riposte. Furthermore, it seems to accord well with Walter's remarks that he rejects a simple truth-functional account of "if" in favour of some firmer connection between formulae. In Walter's own case, this connection is clearly seen as some kind of metaphysical connection between the corresponding objects. As many have pointed out, non-truth-functional accounts of "if" are nonetheless capable of being captured by a formal theory (modal logic supplying one example).¹⁵ The starting point for such a theory is, as we have already seen, that the impossibility of inferring a false conclusion from true premises is a necessary but not sufficient condition for logical validity. 16 In order to see how one might formulate a sufficient condition, it is necessary to re-examine the basis on which logical connectives are founded in the first place. For a start, we need to consider only structures which satisfy a generalised version of the deduction theorem, that:

(GDT)
$$\Sigma \bullet A \vdash B \equiv \Sigma \vdash A \Rightarrow B$$

which states that Σ entails $A\Rightarrow B$ iff we can deduce B from Σ taken together with A, where "taken together" is a wider notion than just set-union. By varying the properties of " \bullet " we can formulate varying conceptions of the conditional.¹⁷ In our case, we want to restrict the behaviour of " \bullet " so that from a proof of $\Sigma \models A$ you cannot infer $\Sigma \bullet B \models A$, where B is not in Σ . There is no unique combination of properties for " \bullet " which yield exactly these conditions, but it is obvious that any candidate combination cannot mirror the classical rules for &I and &E, for this would yield us a truth-functional account of the consequence relation. For present purposes, we can begin by defining a connective " \otimes " at the level of formulae (rather than of structures) with the following two rules:

$$(\otimes I) \qquad \underline{\Sigma} \ | \underline{A} \quad \underline{\Sigma} \ | \underline{B} \qquad (\otimes E) \ \underline{\Sigma} \ | \underline{A} \otimes \underline{B} \qquad \underline{\Pi(A \bullet B)} \ | \underline{C}$$

$$\Sigma \bullet \Pi \ | \underline{A} \otimes \underline{B} \qquad \underline{\Pi(\Sigma)} \ | \underline{C}$$

¹⁵ See, e.g. S. Reid, Relevant Logic (Blackwell 1988), 28.

In what follows, for the sake of generality and simplicity, I will conduct the argument so far as is possible from the level substructural logic, as developed in G. Restall, An Introduction to Substructural Logics (Routledge, 2000).

¹⁷ Restall, Substructural Logics, 10.

This connective, commonly called *fusion*, mirrors directly the behaviour of "•" for structures. So, if "•" is associative, then so is " \otimes ", and so on. In our case, we need to define " \otimes " so that we cannot accept a proof of $A \otimes B$ from X and Y where X
ightharpoonup A and Y
ightharpoonup B, but can accept such a proof from X alone (*i.e.* where X
ightharpoonup A and X
ightharpoonup B). The sense of this connective is captured by Reid:

"There is a familiar truth-functional conjunction, expressed by "A and B," which entails each of A and B, and so for the falsity of which the falsity of either conjunct suffices, and the truth of both for the truth of the whole. But there is also a non-truth-functional conjunction, a sense of "A and B" whose falsity supports the inference from A to "not-B." These senses cannot be the same, for if the ground for asserting "not-(A and B)" is simply that A is false, then to learn that A is true, far from enabling one to proceed to "not-B," undercuts the warrant for asserting "not-(A and B)" in the first place. In this sense, "not-(A and B)" is weaker than both "not-A" and "not-B," and does not, even with the addition of A, entail "not-B," even though one possible ground for asserting "not-(A and B)," namely "not-B," clearly does." "19

In this sense, " $\neg (A \otimes B)$ " is equivalent to " $A \Rightarrow \neg B$," where " \Rightarrow " is non-truth-functional. (We can likewise define an intensional disjunction, " $A \oplus B$," equivalent with " $A \Rightarrow B$.")

We are now in a position to see how the "if" connective is related to fusion. Because fusion mirrors the behaviour of " \bullet ," the fusion connective is parent to the other connectives, such that " \Rightarrow " and " \Leftarrow " are, respectively, left- and right-residuals of " \otimes ." For example, by allowing Weak Commutativity as a structural inference rule, we can have " $A \Rightarrow B$ " as equivalent to " $B \Leftarrow A$." Clearly, by making " \otimes " intensional, we make the conditional intensional also. How, then, does this relate to the notion of logical consequence, and in particular to Walter's argument?

Basically, Walter's argument could be this. Following Gentzen, we can distinguish *generic* properties of the consequence relation, which are set by structural inference rules intent on capturing properties present in *any* consequence relation, from *specific* properties (set by operational inference rules) which are specific to deductive systems.²¹ (In the example above, Weak Commutativity was introduced as an operational rule, laying down rules for operations on formulae.) But, in our generalised framework of operations on structures satisfying GDT, we can vary *any* of the rules on premise combination. By varying the set of structural rules in this way, we arrive at differing relations of consequence; furthermore, our structural rules

Weak Commutativity: $X \bullet Y \leftarrow Y \bullet X$. On the definition of a structural rule, see below.

¹⁸ A. Anderson & N. Belnap, Entailment: The Logic of Relevance and Necessity (Princeton 1975).

¹⁹ Reid, Relevant Logic 38.

G. Gentzen, "Investigations into Logical Deduction" in *The Collected Papers of Gerhard Gentzen* (M. Szabo ed, Amsterdam, 1969), 68ff.

can be made to "drop out" of the nature of the structures we wish to combine. For example, taking sets as the terms of the consequence relation (as in classical logic), we can naturally admit the following among our structural rules:

Reflexivity: $X \leftarrow X$ Mingle: $X \leftarrow X \bullet X$ Weakening: $X \leftarrow X \bullet Y$

Associativity: $X \bullet (Y \bullet Z) \leftarrow (X \bullet Y) \bullet Z$ Permutation: $X \bullet Y \bullet Z \leftarrow X \bullet Z \bullet Y$ Contraction: $(X \bullet Y) \bullet Y \leftarrow X \bullet Y$

Together these properties deliver up a truth-functional connective-set at the level of formulae. By replacing sets with other kinds of structures, various generic properties naturally disappear or become modified (or else require explicit introduction): for example, sequences are sensitive to repetition and order; firesets are (like ordinary sets) insensitive to order but, as with sequences, sensitive to repetition of elements.²² For Walter, clearly, not all of the above rules would be acceptable. Weakening and Mingle, for a start, must be dismissed from any account of consequence to which Walter could subscribe. It is clear from this is that Walter has some room in which to avoid Weinberger's challenge that he has simply misunderstood logical consequence. Rather, Walter can (now) claim, Weinberger's remarks hold true only of the *classical* conception of consequence, which Walter plainly rejects: it is not the case, on our conception, that logical consequence is a straightforward product of the truth-values of constituent premises and conclusion. Some firmer (ontologically-based?) relationship is necessary.

It is unclear, however, which particular combination of rules would satisfy Walter's requirements for a consequence relation. Associativity and Contraction, for example, are not always admissible intensionally (though the relevant logic R admits them). What Walter would seem to require, on the face of it, is a logic weaker than R but stronger than DW, a system in which the only theorems in its implicational fragment are identity statements of the form " $A \rightarrow A$." I will not here speculate on which combination of structural rules would satisfy Walter's demands. (In particular, Walter's demand that a necessary condition of validity for entailments is that "[t]he premises must be true" is, as Weinberger notes, clearly unacceptable: if mathematicians discovered a necessary connection between the truth of an untested hypothesis X and Goldbach's Conjecture, the inference " $X \rightarrow$ " Goldbach's Conjecture is true" would still be valid even if X turned out to be false.) Moreover, it is highly unclear what the metaphysical (and ontological) ramifications of quantifier-endowed substructural- and relevant logics are;²³ conversely, Walter's peculiar ontological motivations are very hard to incorporate systematically any particular theory of deduction. I shall not speculate upon ways in which Walter might develop such a logic.

²² See Reid, *Relevant Logic*, 42; Anderson & Belnap, op. cit.

²³ K. Fine, "Semantics for Quantified Relevance Logic" (1988) 17 Journal of Philosophical Logic 27-69.

What I *shall* do in the remainder of this section is briefly outline what acceptance of a non-classical notion of inference could do for Walter, in terms of an analysis of our opening syllogisms (I) and (II). I will then show why even such an austere notion of logical consequence as Walter would admit does nothing to dispel the perceived asymmetry between (I) and (II), that is, between the so-called factual- and normative-syllogistic forms.

II. Walter and Jörgensen

The argument so far is this. Weinberger's challenge to Walter that the latter has misunderstood logical consequence holds if by "logical consequence" is meant the *classical* conception of logical consequence. Walter can avoid this charge only by arguing that the classical conception is wrong; if he does not do this, I see no way in which Walter can deflect Weinberger's challenge.²⁴ There is, however, a considerable price to be paid for this manoeuvre. By denying that the classical conception of consequence is the right one, Walter places himself in the position of having to provide alternative explanations of both syllogisms outlined at the beginning of this article, that is, both the normative and the factual forms of the syllogism. He must do this because, if the classical conception is wrong (in pronouncing some valid arguments invalid or some invalid arguments valid), the ground on which the argument in syllogism (I) goes through – as Walter agrees it does – must be different from the one we normally think of as allowing such an inference. resulting complexity of explanation does not, of course, entail error; it merely involves Walter in a much more intricate and difficult argument than he appears to envisage: it is apparent from Walter's pursuit of the notion of normative truth that he believes some fairly straightforward account of normative consequence to follow once such a notion has been isolated.

There seem to me to be two main problems with proceeding in this fashion. The first is that, at the present time, the semantics of quantifier-rich substructural logic are not clearly understood. Therefore, any analysis Walter can provide of the normative syllogism (or the factual one, come to that) will be a long way from the metaphysical position he adopts with respect to normative entities in "the world of ought": that is, it is entirely unclear how the one ties in with the other. This is patently very far from Walter's own belief that his ontological solution dissolves the problem of normative inference at a stroke. The second problem is in a sense far more serious, though I shall not explore it in much detail here.²⁵ It is the problem that the radical differences between the semantic structures of syllogisms (I) and (II) above seem not to admit of a single analysis at all. Even if we reject (as Walter must, on the present line of argument) the established rules of inference governing syllogism (I), the semantic structure of the premises remains clearly understandable; that is, we are still able to say in just what way a quantified sentence is built up from a singular sentence or open sentence, and which circumstances govern the attachment of a predicate

Even the most charitable of interpretations of Walter's remarks rules out the possibility of attributing to Walter a doctrine of pluralism with respect to consequence relations, that is, admitting various forms of intensional consequence relations *alongside* that of the classical conception.

²⁵ I have covered some of the ground in Coyle, "The Meanings of the Logical Constants in Deontic Logic" (1999) 12 *Ratio Juris* 39-58.

expression to a subject term. Fregean semantics remains a formally adequate and intuitively acceptable way of comprehending linguistic structures where those structures are descriptions, alethic modalities, and so on. All we are unsure of, if we reject the classical conception of consequence, are the precise rules for $\forall I$ and $\forall E$ in a deductive context – in other words, whether a particular mode of reasoning from a given universal expression to a particular conclusion is valid.

In the case of syllogism (II), the normative syllogism, our problems are much more acute. For it is not at all clear what the correct semantic analysis of the premises is: we are simply not able to say what the semantic contribution of the normative expressions is, in formal terms, to the semantic value of the whole sentence. It is, in other words, not yet a problem of specifying which modes of reasoning are valid for normative syllogisms, but, more fundamentally, of working out a semantic theory for the component sentences. The problem of mapping out of new semantic territory (how normative sub-clauses affect semantic value) is not well understood; certainly, Walter's rudimentary reflections on the ontology of norms and allegedly descriptive sentences about norms, are a long way from providing such a theory. Walter's only available evasive manoeuvre, therefore, tells us no more about the semantic structure and inference rules of the normative form of the syllogism than does the classical conception of consequence. This does not mean that that manoeuvre is not worth making: for Walter, it clearly is if he wants his remarks on logical consequence to escape Weinberger's challenge. The moral is simply that the manoeuvre does not succeed in establishing the formal validity of the normative syllogism; its respectability continues to rest on our intuitive willingness to regard it as a valid piece of reasoning without the means to specify in what, precisely, this notion of "validity" consists. In other words, the gap between the two horns of Jörgensen's Dilemma remains as wide as ever: neither the classical conception of consequence nor the substructural variants provide a ready solution to the dilemma.

Having reviewed Walter's solution to the dilemma, albeit briefly, and found it wanting, I shall now turn to a consideration of the dilemma itself. My argument will be rather different to most existing attempts to explain the mechanics of the dilemma, and therefore probably controversial. Rather than suggesting any particular "solution," I will suggest that Jörgensen's Dilemma is, in the end, no real dilemma at all.

Part II: Dissolving Jörgensen's Dilemma

Most discussions of Jörgensen's Dilemma proceed from two assumptions. These assumptions, and their variants, are both crucial to the conduct of arguments about the dilemma and, within those arguments, unreflective and unarticulated. The first assumption is, in short, that Jörgensen's Dilemma has something of the character of a *paradox*; that two incompatible propositions (that normative reasoning is intuitively valid and that the logical rules which guide our intuitive grasp of validity cannot be applied to normative reasoning) are apparently true simultaneously. The dilemma, on this assumption, forces us to confront an inconsistency in our beliefs in roughly the same way as other paradoxes, such as Russell's, force us to revise our intuitive beliefs about, *e.g.*, mathematics: Russell's paradox, which generates a set that cannot possibly exist, shows us that our naïve

views about set-theory, in particular that every non-empty concept has an extension, are wrong. As such it forces us to make a choice between a continued belief in a particular (and at the time universally and unreflectively accepted) view of logic, and an alternative view which looks, on the face of it, to be highly counter-intuitive. Likewise, Jörgensen's Dilemma imposes upon us a choice between a particular (and widely accepted) view of logical validity — one which cannot be applied to normative reasoning — and our deeply held belief that our normative arguments are, in some way, rationally assessable.

Further implicit in this widespread approach to the dilemma is a mute acceptance of its two "horns." In other words, if we accept that the dilemma presents us with an inescapable choice between two competing, and apparently exhaustive, possibilities, then we have in effect already assumed the credentials of the two propositions which compose the dilemma: we implicitly affirm that they are, until further notice, worthy of serious respect. My response to Jörgensen's Dilemma begins by inspecting this second assumption, for without it, the character of the dilemma as a paradox, demanding an apparently impossible (or unpalatable) choice, simply dissolves. When looked at closely, the assumption that the two horns of the dilemma are heavyweight truths doing battle with one another, seems to me simply bizarre. The following argument is designed to show why.

Horn 1

The first horn of Jörgensen's Dilemma is the proposition that imperative sentences cannot be valued as true or false and that, therefore, they are not capable of standing as premises in logical inferences. As it stands (and as Jörgensen, somewhat more carefully than his later commentators, characterised it), there is little to quarrel with in this statement. Even for those writers who believe in the possibility of a logic of imperative sentences, it is straightforward that by our commonly accepted notion of logical validity, no argument exists to establish that arguments containing imperative sentences are valid in *that* sense. Moreover, no alternative conception of logical validity has been successfully devised which shows beyond doubt that arguments of that sort can be pronounced logically valid in some other way. Were this the extent of the problem, there would be no great issue about the character of normative reasoning; for Horn 1 is, as so far characterised, a marginal problem affecting a tiny range of normative propositions.

Two observations will help to put things in perspective. The first is that Jörgensen's Dilemma concerns only *imperative* sentences, which form a rather small subclass of the entirety of normative expressions used in everyday normative (moral, legal and political) reasoning. Roughly speaking, imperative sentences are the ones we utter in order to provoke an action, rather than as, say, the justification for performing an action or wanting an action performed. They will ordinarily reflect, therefore, the outcome of a process of reasoning rather than the basis of further deductions. (It is worth noting in passing that the syllogistic treatment of Jörgensen's candidate sentence, "Love your neighbour as yourself," (see syllogism (II) above) is not all that convincing if the conclusion is indeed supposed to represent a logical entailment.) Let us call this sentence, for brevity, "the Jörgensen sentence."

The Jörgensen sentence (which does not in the ordinary sense express a proposition), and others such as "Keep your promises," are highly characteristic of the kinds of sentences studied by deontic logicians and those otherwise concerned with the implications of Jörgensen's Dilemma. Deontic logic, of course, explores genuine propositions (e.g. "Promises ought to be kept" rather than "Keep your promises"), but those familiar with the literature on deontic logic and its offshoots will be all too familiar with the parallel problems faced when dealing logically with those sentence-forms. The following point, which forms the second observation flagged above, concerns them no less than their imperatival cousins. The kinds of sentence studied by deontic logicians and other theorists are typically very highly refined statements which have two important properties. First, one never sees them in actual contexts of normative argumentation, except perhaps rarely as very basic starting points for consideration (in the case of deontic expressions) or as the "executive" expressions by which one provokes action (in the case of imperatives.)²⁶ Moral, legal and political arguments deal exclusively with decidedly practical (even if non-realised) normative contexts which have little in common with the type of infinitely abstract situation pondered by deontic logicians (if indeed what deontic logicians consider can be dubbed "situations" at all.) Moreover, normative reasoning occurs in such arguments in an idiosyncratically practical form even where the debate about which course of action to take (or which course of action is or was the more justifiable) takes the form of a debate over general principles.

Moral arguments about promising, for example, concern practical contexts of promising rather than the concrete application of a principle which in any way resembles a deontic rendering of the Jörgensen sentence "Keep your promises." Nor are such arguments debates about principles such as "One ought to keep one's promises all things being equal," since no principle of equality can be transferred into any situation of promising where moral guidance is required to direct action. Precisely because there is a moral issue at stake, factors do not stand in such a way as to offer comparison with the deontic logician's ideal case. That case is, in fact, no "case" at all. In other words, one should not suppose that any readily identifiable paradigm case of promising (such as where A promises B the loan of his car next week, and nothing later interferes with his ability, or ordinary willingness to deliver on the promise) corresponds to the deontic logician's ideal case. The features which make the case a paradigm case - say, the car being in working order, A not requiring the car at the time when the promise stands due for delivery, perhaps to drive his wife to the emergency ward - do not aid in the construction (by abstraction) of a principle of ceteris paribus of the sort required for deontic logic. Rather, they are precisely the sort of feature which enable us to put meat on the bones of such notions as "ability" and "ordinary willingness" - notions which often form the central focus of arguments concerning promise-keeping: the reason that, in the paradigm

In case there is some confusion over this point, it is worth remembering that "Love your neighbour," "You may leave now," etc. are action-provoking statements which should not be mistaken for genuine normative propositions within arguments, such as "All human beings must love their neighbour", "All promises should be kept," etc.

case, A's ordinary willingness to oblige (his wife is not ill, and so forth) is of relevance is just because we have developed, in various real and readily imaginable situations, a well-worked out notion of what "ordinary willingness" is, and in what ways it is important to the practice of promising.

The second feature of the normative "principles" cognate with their Jörgensen sentences, is that they are false, rather than genuinely arrived-at, abstractions. That is, by the same token as before, it is impossible to refine or distil practical contexts of normative argumentation and reasoning such as the one exemplified above, in order to establish universal general principles of the kind required for deontic logic.²⁷ In a great many contexts, moreover, discussion may not be based on any serious disagreement over moral principles or their respective ranges; they tend to focus simply upon which action should be performed (or whether it is right or wrong) in the circumstances, not on whether the action in question conforms to, or falls within the range of application of, some normative principle. To summarise: actual contexts of normative argumentation and reasoning are not merely far more complex than the rudimentary derivations performed in deontic logic and like systems; they in fact bear *no relation* to one another at all.

Why should Horn 1 of Jörgensen's Dilemma therefore hold such importance for us? If, as I have suggested, the apparent unavailability of a logical treatment of normative principles has negligible effect (or no effect) on actual occurrences of normative reasoning, why should we regard Horn 1 as an important truth which anyone concerned with practical reasoning must confront (and find painful)? The reason, I believe, lies in the perceived relationship between Horn 1 and Horn 2. Horn 2, it will be recalled, states that our everyday normative arguments seem to make sense to us notwithstanding the apparent fact that we lack a logical means of assessing their validity. (If my foregoing argument is accepted, the answer seems plain enough: that Horn 1 has nothing essentially to do with Horn 2.)28 The proximity of these two propositions – their formation into a dilemma – has a curiously strong impact on the mind; for it encourages us to believe, without a great deal of difficulty, that if normative arguments cannot be pronounced logically valid, then they cannot be seen as rational arguments at all. Is such an assumption justified? Let us examine Horn 2 more closely.

Horn 2

Giving some firm content to the intuitive feeling about normative arguments identified by Horn 2 – that our normative arguments seem in some sense valid – is precisely what Jörgensen's Dilemma invites us to do. The implicit assumption lying beneath the surface of Horn 2, that a notion of validity which does not (and cannot) appeal to logical validity is deeply troublesome (and perhaps bizarre) is one explored by Stanley Cavell in his excellent

27 In the specific case of "Love your neighbour" (or "All human beings must love their neighbour") there is an implicit appeal to authority (the Bible), not a performed abstraction from practical contexts of neighbour-loving.

²⁸ The idea that Horns 1 and 2 enjoy a very close relationship is, of course, precisely the content of the first assumption about Jörgensen's Dilemma which I was keen to spell out earlier; namely, that it has the character of a paradox.

discussion of normative reasoning.²⁹ Cavell's argument begins with the observation that questions about the nature of moral judgments are usually approached via questions about the "faculty" by which they are "known".³⁰ This, in turn, commonly takes the form of an inquiry into the differences in our assessment of ordinary claims to knowledge and those of moral claims.³¹ Behind both sorts of claim is the idea that our claims to knowledge are somehow grounded in authority: in the case of ordinary knowledge claims, this might take the form of appeal to sense-data, or to scientific principles and so on; moral philosophers likewise search for the foundations of moral authority.

It is held to be in the nature of appeals to authority that ordinary knowledge claims differ from moral- or other normative claims. In the former case, the purpose of the appeal to authority is to procure rational agreement, or rather to show that agreement on ordinary matters is epistemologically possible (that the reasoning process can be brought to a definitive end). This ability to procure agreement though argumentation is precisely why (according to many) normative arguments are not rational, *i.e.*, are incapable of rational settlement. But, says Cavell:

"such an implication rests upon two assumptions, one about the nature of rationality and one about the nature of moral argument. The first is the assumption that the rationality of an argument depends upon its leading from premises all parties accept, in steps that all can follow, to an agreement upon a conclusion which all must accept. The second assumption is that the goal of a moral argument is agreement upon some conclusion, in particular, a conclusion concerning what ought to be done."

The idea behind the first of these assumptions is that where two people cannot be brought to agreement on a particular matter, their disagreement can be ultimately (or objectively) resolved by a proof that one of them is either incompetent in a particular mode of reasoning (*i.e.* has not understood the steps), or is otherwise irrational. This standard, according to Cavell, is clearly inappropriate to normative arguments, for it is ludicrous to suggest that in such arguments the rationality of two antagonists is dependent upon an agreement emerging between them: where two people disagree about what is to be done, it is nonsense to suggest that their disagreement is the product of either incompetence in reasoning or irrationality *tout court*. This is precisely because no "proof" of such incompetence or irrationality can be forthcoming. If we accept the possibility of *rational disagreement* about a conclusion, therefore, we must accept a notion of (moral, legal or political) rationality which is manifest through argumentation without the possibility

²⁹ S. Cavell, *The Claim of Reason* (Oxford, 1979), 247-326. The argument to follow is essentially Cavell's, except insofar as it addresses Jörgensen's Dilemma.

The Claim of Reason, 248. The only other commonly pursued avenue into this issue, according to Cavell, is via a concern with the logical form of normative sentences and a preoccupation with the logical properties of moral arguments. Since I have already explored this in some detail above there is no need to recover the ground now. (Hereinafter, Claim.)

Claim, 251.
 Claim, 254.

of agreement to supervene. That is, although the *hope* is that the argument will lead eventually to agreement (for without this hope there is little reason for having the argument in the first place), the eventuality of agreement is not a prerequisite for the rationality of the argument.³³

According to Cavell, therefore, moral arguments are made to look irrational next to scientific reasoning because science and logic are taken as providing the models for rationality of argument; and the aspect of logic and science which has most struck philosophers in this respect is "the fact of agreement which can be achieved in [such] argument."³⁴ However, Cavell warns, whilst it may be the source of the rationality of logical and scientific reasoning, agreement "may not be necessary to the idea of rationality generally". That is, in following the models of logic and science, we are presupposing that the goal of all moral argument is agreement (rather than, say, justification for action).

An objection may be interjected here that Jörgensen's Dilemma is not concerned with our ability to agree on substantive moral truths, and only very indirectly with our ability to agree at all. What the dilemma emphasises, the objection may run, is merely certain logical and semantic properties of imperative sentences and their impact on our perceptions of validity. I do not think that this objection has any force, however. In the first place, it implicitly affirms the criticism I made of Horn 1 earlier; namely that it has no visible relation to ordinary moral (legal, political) reasoning. In the second place, it is precisely the assumption implicit in Horn 2, and its particular relationship with Horn 1, that our inability to articulate logical principles for normative arguments leaves us with no means of adjudicating, rationally, upon disagreements of principle.

To bring out this important distinction between ordinary knowledge claims and moral ones, consider this further point by Cavell. He asks us to contrast cases in which moral arguments break down (*i.e.* fail to produce agreement) with the following argument between two competent speakers about a bird that they have spotted in a nearby tree. The first speaker claims that the bird is a goldfinch, on the basis that it has a read head. Speaker two regards this as insufficient for a positive identification since goldcrests also have red heads. At this point, Cavell says, if the argument stops then it is because Speaker one's claim to know that it is a goldfinch has lost its significance: it *may* be what Speaker one says it is, but the claim has been insufficiently supported; or, in other words, "the opening exposed by the ground for doubt has not been closed". Therefore, for the argument to continue, "the ground for doubt must itself be impugned ("The shape of the goldcrest's head is different") or a new basis proposed ("I know not just from the head but from the eye-markings.")" In such cases, Cavell argues,

"It is not up to the protagonists to assign their own significance to bases and grounds for doubt; what will count as an adequate basis and sufficient ground for doubt is determined by the

³³ Claim, 254-5.

³⁴ Claim, 260-1

³⁵ *Claim*, 267.

³⁶ *Ibid*.

setting of the assessment itself. When I counter a basis by saying "But that's not enough," there is no room for you to say, "For me it is enough." "37

But in moral contexts of argument, says Cavell, what is "enough" is itself part of the content of the argument. In other words, in ordinary epistemological contexts, the relevance of a ground of doubt is itself enough to impugn the basis of the claim as it stands; and also therefore the claim to knowledge itself. But in moral argument, it is possible to refuse to accept a ground of doubt *without* impugning it as false. The only thing a competent speaker cannot do (on pain of irrationality/incompetence in reasoning) is deny its *relevance*. This seems to form an adequate gap quite generally in normative contexts between the availability of *agreement* and the rationality of the discourse and protagonists as such. Moreover, if it does not, then it is difficult to see what moral argument can possibly be about in the first place; that is, hard to see what would motivate the belief, properly identified by Horn 2, that normative arguments *appear* to be genuine cases of argument.

Relationship Between Horns 1 and 2

Where does all of this leave us? The foregoing argument was intended to question the validity of two common assumptions about Jörgensen's Dilemma: The first is that its two Horns represent important and possibly awkward truths about the nature of moral reasoning, with which moral philosophers and those concerned with practical reasoning in general must grapple. The second is that those propositions, neither of which can apparently be rejected, cannot be simultaneously true. I have argued, conversely, that neither proposition is a "heavyweight" truth about our normative discourse, and that there is nothing in the character of either proposition that philosophers should find troublesome. More importantly, I have tried to show how the juxtaposition of these two constituent propositions in the formulation of the dilemma has led to a particular view of the relationship between them, especially in encouraging the erroneous belief that the truth of Horn 1 entails the hollowness of the intuition about normative reasoning expressed in Horn 2.

On close inspection, Horn 1 – the proposition that imperatival arguments resist logical analysis – far from posing a very serious threat to our warrant for drawing conclusions of a moral nature from other premises, affects a range of arguments that do not belong to moral or legal reasoning, or indeed any form of practical reasoning in which human beings participate. Horn 2 (the proposition that normative reasoning seems to be rationally comprehensible in spite of our inability to pronounce normative arguments logically valid), in its turn, sets up a puzzle about normative reasoning only granted its implicit endorsement of the idea that the logical validity of an argument is a precondition for its rationality. As such it blinds us to an obvious truth: normative reasoning does not "seem" to be rationally comprehensible "in spite of" its non-logical character; as any human agent could attest, such reasoning is rationally comprehensible in the contexts in which it is employed. If it were not, our moral and legal reasoning would make no sense at all. Our willingness to believe in the existence of

³⁷ *Ibid*, emphasis suppressed.

dilemma therefore rests on uncritical but widespread acceptance of a naïve interpretation of its two component propositions.

CONCLUDING REMARKS

I have argued that the correct strategy for dealing with Jörgensen's Dilemma is not to try to "resolve" it, but simply to realise that there is no genuine dilemma at all. Such a move requires us to reassess our attitudes to both horns of the dilemma, which upon reflection stand in no close relationship to one another. The appearance of a close relationship depends upon an unreflective acceptance of several crucial (though attractive) assumptions concerning norms and rationality which, far from representing primitive, compulsory truths about our normative practices are in fact the outcome of highly refined positions on various matters touching on the nature of norms and of rationality. The attractiveness of these assumptions, gives rise to a particular view of the significance of the two horns of the dilemma, a view strengthened significantly when those propositions are uttered in close proximity to one another. It is this proximity which, in turn, gives rise to a particularly potent illusion of a dilemma. I hope the course I have taken in the foregoing argument dissolves that illusion and, with it, Jörgensen's Dilemma.