A CRITICAL ANALYSIS

OF

RICHARD TAYLOR'S ARGUMENT

IN FAVOUR OF FATALISM

A Thesis

Presented to

The Faculty of the Department of Philosophy

University of Manitoba

In Partial Fulfilment of

The Requirements for the Degree of

Master of Arts

by

Gunars Tomsons

September, 1967

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ABSTRACT

The aim of this thesis is to provide an analysis of
an argument which Richard Taylor has formulated in support
of the claim that all statements of the form "It is now with-
in my power to do x, and it is also now within my power to
do non-x" are false.

The first two chapters of the thesis consist of a dis-
cussion of the above claim, the first chapter containing a
discussion of the uses of the expressions "I can", "within
my power", and "It is possible for me", as well as a dis-
cussion of the dispute concerning the analysis of "I can"
in terms of a causal conditional. It is concluded that most
of the arguments found in the philosophical literature fail
to show that such an analysis is illegitimate, but it is al-
so concluded that an argument by Richard Taylor reduces
greatly the plausibility of an analysis of this kind.

Taylor's own analysis of "can" statements is dis-
cussed in the second chapter, and it is concluded that
Taylor's analysis of "I can do x" as representing the state-
ment "Doing x is within my power and my doing x is causally
contingent" does not appear to be adequate. The second ch-
apter also contains a discussion of Taylor's position with
respect to the meaning of the expression "within my power".
Since the discussion concerns the relation of this expression
to basic modal terms, a discussion of the uses of modal terms
is also provided. It is concluded that Taylor's suggestion

that the phrase in question cannot be expressed by the use
of modal terms cannot be fully supported, and that the accepted
rules of modal logic can be used to test the validity of argu-
ments which include statements containing the expression "with-
in my power".

A short discussion of determinism and fatalism is
provided in the third chapter. The aim of this discussion is
to show that Taylor's fatalistic thesis does not represent
the position which is usually thought to be the fatalistic
position, namely, that human actions are not efficacious.
The last chapter is designed to show that Taylor has not suc-
ceeded in his attempt to establish his fatalistic thesis. The
discussion contains a critical analysis of most of the critic-
isms found in the literature and it is argued that Taylor's
use of the terms "necessary condition" and "sufficient con-
dition", and his acceptance of the principle, that no agent
can perform any given action if there is lacking, at the same
or any other time, some condition or state of affairs necessary
for the occurrence of that act, are the reasons for the failure
of his argument.

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INTRODUCTION

The purpose of this thesis is to present a critical analysis of Richard Taylor's argument in favour of fatalism. The argument was first published in The Philosophical Review[1] under the name "Fatalism" and it was included by Taylor in his book Metaphysics.[2] The argument is essentially the same in both publications. Only minor explicatory passages have been added by Taylor to his original argument. I have chosen his Metaphysics as the basic source for my analysis of the argument.

I shall, first, in this introduction present an outline of Taylor's argument, and then I shall turn, in the first and second chapters, to a critical analysis of Taylor's fatalistic thesis, i.e. the conclusion of the argument, in order to show what position Taylor wants to defend. In the third chapter, I shall discuss the distinction between fatalism and determinism, and I shall argue that Taylor's fatalistic thesis represents a kind of determinism rather than fatalism. The fourth chapter is devoted mainly to a discussion of Taylor's premises. This discussion will include a critical review of most of the criticisms of Taylor's fatalistic argument found in the literature.

An Outline of Taylor's Fatalistic Argument

Taylor's defence of fatalism consists of three arguments:

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[1]   R. Taylor, "Fatalism", The Philosophical Review, LXXI (1962), pp. 56-66.

[2]   R. Taylor, Metaphysics (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963), pp. 54-69.

one main argument and two supporting arguments. The premises of
the main argument (Argument II)[3] can, for the sake of convenience,
be divided into Principles (P), Assumptions (A), and Premises (Pr).
One supporting argument(Argument I) consists of showing that
certain changes made in the Assumptions and in the Premises do
not affect the conclusion drawn from the premises. The other
supporting argument (Argument III) is designed to show that if
we assume the contradictory to the fatalistic thesis we are led
to deny one of the Principles which we, according to Taylor, are
unwilling to deny. I turn now to the exposition of the Arguments.

Argument II

Taylor intends to establish the thesis that it is not the
case that a statement of the form "It is now within my power to
do O, and it is also now within my power to do -O" (where 'O'
ranges over acts) is sometimes true.[4] Taylor also claims that
the embracing of this belief is a sufficient condition for being a
fatalist. In order to establish his thesis he provides us with
premises from which he deduces the fatalistic thesis, namely,
that it is false that it is now in my power to do O, and it is also
now within my power to avoid doing O. Taylor furthermore claims
that most people would not doubt the truth of the premises. Thus
he suggests that those people ought to be fatalists, provided that
they accept the epistemic principles that we ought to believe

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[3]   I adopt Taylor's numbering of the arguments.

[4]   R. Taylor, _Metaphysics_, p. 61.

what is true and that we ought to be consistent.

I shall now list the premises starting with the Principles.

P 1   Any proposition or statement whatever is either true or, if not true, then false.

P 2a   If any change or state of affairs is sufficient for the occurrence of some other change or state of affairs at the same or any other time, then the former cannot occur without the latter occurring also, even though the two are logically unconnected.

P 2b   If one state of affairs ensures another, then the former cannot exist without the other occurring too.

P 3a   If any change or state of affairs is necessary for some other change or state of affairs at the same time or some other time then the latter cannot occur without the other occurring too even though they are logically unconnected.

P 3b   If one state of affairs is essential for another, then the latter cannot occur without it.

P 4   If some change or state of affairs is sufficient for (ensures) another, then that other is necessary (essential) for it; and conversely, if some change or state of affairs is necessary for another, then that other is sufficient for (ensures) it.

P 5   No agent can perform any given action if there is lacking, at the same or any other time, some condition or state of affairs necessary for the occurrence of the act.

P 6   Time is not "efficacious".

In the above list of Principles P 2b is in Taylor's view an alternative but logically equivalent presentation of P 2a. Similarly, P 3b is logically equivalent to P 3a.

We are also asked to make the following assumptions:

A_1 S is a naval commander.

A_2 S's issuing an order (O) ensures the occurrence of a battle tommorow (Q).

A_3 S's issuing another order (-O) ensures the non-occurrence of the battle (-Q).

A_4 O and -O are alternative possible acts.

Taylor then claims that given the above principles and assumptions we are led to the fatalistic thesis by the following argument:

Pr_1 If Q is true, then it is not within my power to do -O (for in case Q is true, then there is, or will be, lacking a condition essential for my doing -O, the condition, namely, of there being no naval battle tomorrow).

Pr_2 But if -Q is true, then it is not within my power to do O (for a reason similar to the one given in Pr_1).

Pr_3 But either Q is true or -Q is true.

C   Therefore,

Either it is not within my power to do O, or it is not within my power to do -O.

The conclusion of this argument is however equivalent to "It is not the case that, it is now within my power to do O, and it is also now within my power to do-O". And this is exactly the denial of Taylor's non-fatalistic thesis (B):

It is now within my power to do O, and it is also now within my power to do -O.[5]

Argument I

The argument here is formally the same as Argument II, and its purpose is to show that fatalism with respect to past events is supported in the same way as fatalism with respect to future events. Taylor's intention is to show that all considerations of time are irrelevant as far as the success of his general argument is concerned.

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[5]   R. Taylor, Metaphysics, p. 61.

Taylor presents us with an example in which the occurrence of a naval battle yesterday is a necessary condition for our reading of a certain headline in today's newspaper, and the non-occurrence of the battle is a necessary condition for our not reading of the headline. Taylor says that assuming this we can argue that if the fight did occur, it is not in our power not to read the headline, and if the fight did not occur then it is not in our power to read the headline, provided, of course, that we are looking at the newspaper. But the battle either did or did not occur and therefore either it is not in our power to read the headline or it is not in our power not to read the headline.

Thus the following changes have been introduced in the Assumptions and the Premises:

A_1' S is a person.

A_2' S's reading a headline (h) today ensures the occurrence of the fight yesterday (f).

A_3' S's not reading the headline (-h) ensures the non-occurrence of the fight yesterday (-f).

A_4' h and -h are alternative possible acts.

Abbreviating the rest of the argument we have:

Pr_1' f ⊃ (-h is not within S's power).

Pr_2' -f ⊃ (h is not within S's power).

Pr_3' f v -f.

C   (-h is not within S's power) v (h is not in S's power).

From (C) Taylor infers that the non-fatalistic thesis, namely, "h is in S's power and -h is in S's power" is false, for (C) entails

C_1 -(-h is within S's power. h is within S's power).

Argument III

Taylor has provided an additional argument, which is supposed to show that given the non-fatalistic thesis, namely, "It is within my power to do O and it is within my power to do -O" and two other premises, we do conclude that the law of the excluded middle is false. As this result is not acceptable to most people the argument is really used to show that the non-fatalistic thesis is absurd.

1.   If Q is true, then it is not within my power to do -O. (Pr_1)

2.   But if -Q is true then it is not within my power to do O. (Pr_2)

3.   But it _is_ within my power to do O, and _it is also_ within my power to do -O. (The non-fatalistic thesis)

Therefore,

4.   Q is not true, and -Q is not true.

The outline of the argument is now complete and I shall turn to a critical analysis of the conclusion of the argument, namely, "It is false that it is now within S's power to do O, and it is also now within S's power to do -O."

CHAPTER I

THE CONDITIONAL ANALYSIS OF "CAN"

In this chapter I shall first attempt to point out the various uses of the terms "within my power", "can" and "able", because Taylor uses these terms within his argument as if they were equivalent in meaning, and I shall then review various attempts to analyze "can" statements and the objections to such analysis. My discussion is to be considered as a part of a critical analysis of the thesis which Taylor intended to establish, namely, "It is false that it is now within S's power to do O, and it is also now within S's power to do -O."

Power Statements

In the following discussion I am concerned with statements of the following kind:

    It is possible for me to do X.
    It is not possible for me to do X.
    It is in my power to do X.
    A can do X (where A refers to a human agent).
    A cannot do X.
    A has the capacity to do X.
    I am able to do X.
    I am not able to do X.

I shall call such statements "power statements".

Within the philosophical discussions much attention has been given to the analysis of power statements using the term "can" or "could". It has been maintained either that these statements are categorical statements, i.e. that the grammatical form of these statements coincides with their logical form, or that these statements are actually hypotheticals. The focal point of interest in most of these analyses has been

the case where we want to assert that men have the ability to do things which they actually did not do. Thus the analysis of "S could have done x" has received most attention. These statements obviously concern past non-actual states of affairs. It is then assumed that the statements using "can" behave in somewhat similar manner to the statements about the agent's abilities in the present or future tenses. The main interest, of course, has been directed towards a very particular ability of the agent, i.e. the ability to choose between two actions. In order to clarify what particular ability is under discussion here, I shall classify the various uses of power statements as far as they are used with respect to human beings. I do not intend to assert that these uses are mutually exclusive, although it seems to me that on some occasions power statements are used to indicate that a particular condition for the performance of an act has been satisfied. I shall adopt the following classification:

1. Skill sense

The power statement is used in this sense in a situation in which we claim that S is able to eat with chopsticks, or that S is able to type, or that S is able to fly an aircraft in virtue of the particular training obtained.

2. Instrumental sense

The statement "I can drive down to Toronto" is used in an instrumental sense if the man who says it wants to add the explanatory clause "because I just bought a car". "I can drive the nail into the wall because I found the hammer", is another

example of the use of a power statement in the instrumental
sense.

3.   Physical strength sense

This sense is exemplified by the following statements:

(a)   I can push a lawn mower (said by a girl, five years
      old).

(b)   I cannot lift the car.

4.   Non-physical strength sense

The statements "I cannot endure it any longer" when
said by the jealous wife before asking a divorce, or "I can
bear my sorrow" illustrate the non-physical strength sense.

5.   Authority sense

The following statements illustrate the authority sense:

"I am able to lead my people; they must trust me".

"It is in my power to punish you".

"I can decide that" (said by President Johnson).

6.   Normative sense.

The term "can" used in the normative sense indicates
that it is reasonable for the agent to do what he is intending
to do. Thus, if I say that I can infer from certain premises
to a conclusion, I am indicating that it is reasonable for me
to do so. Also, if I say that I can break a promise in certain
circumstances, I am indicating that it is reasonable for me to
break a rule, or, if I say that I cannot expect a certain kind of
behaviour from a child, I am saying that it is unreasonable to
expect that kind of behaviour from a child.

7.   Logical sense

The statement "I cannot draw a square circle" is an ex-

ample of the logical sense of power statements. In ordinary

discourse it is probably used very little. We will seldom say

that we are able to do A just because our doing A is logically

possible, though this is a logically necessary condition for all

the other uses of power statements.

All the above uses of power statements have one thing in

common, namely, that each statement implies a statement about an-

other state of affairs as a necessary condition for the state

of affairs expressed by the power statement.

Thus: 1.   "I am able to eat with chopsticks" implies

             "I have learned to eat with chopsticks".

        2.   "I can drive to Toronto" implies "I have a

             car".

        3.   "I can push a lawn mower" implies "I have

             strength".

        4.   "I can bear my sorrow" implies "I have fortitude".

        5.   "I can decide this issue" implies "I am in a

             position of authority."

        6.   "I can break my promise (if an over-riding principle

             which I hold compels me to do so)" implies "It is

             reasonable for me to break my promise".

        7.   "I can draw a square" implies "It is logically

             possible to draw a square".

However, there is one use of power statements which seems to

be basically different from other uses in virtue of its nec-

essary condition. In this particular use the power statement

is used to signal that, apart from many other conditions for

the performance of the act being satisfied, one special condition
is also satisfied. Thus:

    8.   "I can do A" implies "I can do -A", and conversely

    8a. "I can do -A" implies "I can do A".

Hence we obtain the following biconditional:

    8b.   I can do A if, and only if, I can do -A.

For instance, if my hitting a man implies that I can also avoid
hitting him, then it is also true that I can hit a man if, and
only if, I can avoid hitting the man. In this sense of "can", if
I claim that I cannot avoid hitting the man I am not entitled to
claim that I <u>can</u> hit him. I shall call this use of power state-
ments the contingency sense of power statements, and I would now
like to consider on what occasions one would want to use power
statements in this way.

On the occasion when I am doing x, my statement that I am
doing x entails that I am able to do x or that I can do x. But
it seems that on this occasion I will never utter "I can" or "It
is within my power to do x" in the contingency sense. If I am
swimming now and I call out: "I can swim", I do not intend to
indicate that I can swim now and that I can also avoid swimming
now. I want to indicate that I have learnt to swim, that I
have finally achieved my goal. However, the reason why I do
not attempt to indicate that I can do (in the contingency sense
of "can") whatever I am doing is that part of what I mean when
I say that I am doing x is that I could do y, though I am
doing x. There are cases where I may want to say that I am
doing x but that I cannot do y. For instance, if someone threatens
me with a gun asking me to open a bank safe, I may say that I

am opening the safe and that I could not do otherwise. However, in this case I am claiming that it is unreasonable for me to refrain from opening the safe, and in _that_ sense I cannot open the safe. Nevertheless, if I am compelled to open the safe, my claim that _I am doing_ this act entails that I can do it in the contingency sense of "can". If, however, I am over-powered by some bandits and pushed over a cliff, then, of course I am not doing anything. Something is done _to_ me or _with_ me. Similarly, if I am shivering, I cannot claim that I am doing something, but only that something is _happening to_ me.

With respect to future events, if I am announcing my intention that I shall do x, I am also saying that I can do x although I could do y. In the case of my announcing that I shall not do x I may also want to assert that I can do x, or that I could do x, or that it is within my power to do x, or I may want to deny it.

With respect to past events I can distinguish between the following cases. (a) If I say that I did not do y, I may also want to assert that I could not do y. Here I am denying that my omitting to do y is a contingent event. Then there is the case (b) where I am saying that I did not do z, and that I could have done z, provided that the conditions x and y had been satisfied, or that it would have been in my power to do z, provided that the conditions x and y had been satisfied.[6]

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[6] It is interesting to note that "I could have done z" implies "I did not do z", whereas "It was in my power to do z" does not imply "I did not do z".

On another occasion (c) I may want to assert that I did not
do z and that I could have done z, or that it was within my
power to do z, without the further claim that my having the
power to do z depended on the satisfaction of some conditions.
Then, lastly, (d) I may want to assert that I did not do z,
and that I could have done z, if I had wanted to do z. But
it seems to me that nothing more is asserted here than in the
case (c), as far as the act's being in my power is concerned.

In the above case (b) we actually have two sub-cases.
If I claim that I could have done z if the conditions x and y
had been satisfied then I could again claim that either I could
satisfy these conditions or I could not. In the latter in-
stance my claim is equivalent to my claim in (a). If I want
to assert the former, i.e. that I _can_ satisfy the conditions x
and y, then the case (b) is equivalent to (c). If I announce,
on the other hand, that I did x, then, as in the case of my
statements about my present acts I am saying that I had it in
my power to do x or that I could do x, using the expressions in
the contingency sense.

Considering now the kind of situations in which we do
use a power statement in the contingency sense, we can, I think,
distinguish between the following cases. When I consider my
past actions, I may think _and_ claim that I could have done x,
regretting my having chosen "the wrong thing" and blaming my-
self for having chosen to do something which contributed to my
disadvantage or something which was not morally permissible.

When I consider future actions I may have the opportunity

to claim that I can do x or that A can do y in the situations
in which I deliberate about my future actions or in the sit-
uations in which I give advice to someone about the choices
open to him. Thus, I may claim that I or he can do this or
that, and in this case I am using the power statement in the
contingency sense. Moral considerations may or may not enter
here depending on whether I am choosing between doing my duty
and the satisfaction of my desires or whether I am choosing
between two morally permissible acts. Thus it is clear that
we not only presuppose or imply by many of our claims that we
can do a certain act (in the contingency sense of "can"), but
that we also use power statements in the contingency sense.

The Purpose of a Conditional Analysis of "Can"

The main interest in any controversy about "can" state-
ments, usually within the context of a discussion of determin-
ism, or of moral responsibility, has been directed toward the
contingency sense of "can". Within such discussions a trans-
formation of "A can do x" into a causal conditional has been
attempted primarily in order to show that the determinism which
claims that every event including human actions has a cause
does not conflict with the assertion that A could and did do
x and that he also could have done -x, nor with the assertion
that A can now do x and that he now can also do -x. It is
claimed that if such transformation were successful, we could
then say that "A can do x" means "p causes S's doing x" and "A
can do -x" means "q causes S's doing -x", where the interpret-
ation of p and q would depend on the particular analysis which

we would have adopted as the correct one. Thus p has been
interpreted either as "S is trying to do x" or as "S chooses
to do x". Willing, wanting, intending have also been considered
as causes of actions and therefore as suitable antecedents for
the causal conditional which is said to be representing the
actual logical form of the "can" statement.

G. E. Moore suggested this kind of analysis of "can"
statements.[7] He claimed that "I could" is simply and solely
a short way of saying "I should, if I chose", though he has
also said that "could have done" is equivalent to "could have
done, if chosen". As Moore was arguing for the compatibility
of determinism with free action, it seems reasonable to suppose
that Moore intended to show that "can" or "could" is used to
indicate a condition for an act rather than to show that it
is used to indicate a condition for the ability to act. How-
ever, his statements have provoked discussion of two different
kinds of analyses of "can" statements. On the first kind of
analysis statements of the form "I can do x" are said to be
equivalent in meaning to "I can do x, if I choose to do x";
the second analysis claims that "can" statements have the log-
ical form of "I shall do x, if I choose to". It has been argued
that the "if" on the first kind of analysis is not the "if" of
a causal conditional, and that, generally, in a statement of
this kind, "if" does not indicate any condition for the ability
to act. Prima facie it is rather surprising that anyone should
assume that the statement "I can, if I choose" is a conditional

[7]   G. E. Moore, Ethics (London: Oxford University Press, 1961), pp. 122-127.

statement at all, because it does not seem that choosing could be a condition of someone's _ability_ to act. Therefore some consideration of our uses of the term "to choose" is in order.

"To Choose"

It seems that there are at least five different uses of the verb "to choose".

First, we use the term "to choose" in place of "to deliberate", where the latter term could be defined as follows:

A deliberates if, and only if,

1. A thinks actively about the actions which he could possibly do, and

2. A aims to make a decision.

The term "to decide" can, in turn, be defined in the following way:

A decides what to do, if, and only if,

1. A terminates a deliberation about a possible action, and

2. A intends to do a particular action.

The last definition defines also the second use of the term "to choose", as we often use the term "to choose" in place of "to decide". Thus, for instance we say that A has chosen his course of action, meaning that he did deliberate what to do and that he decided his future acts.

Thirdly, we use "to choose" instead of "to intend", and fourthly, we use "to choose" to indicate that the agent is doing something which he has or had decided to do. Thus we say that A chose a car, meaning that A _took_ a car after deciding to take

_it_ rather than a horse. Fifthly, and finally, we use the term in question when we want to indicate that the agent is doing what he intended to do. For instance, we would say that a man being very hungry chose the largest piece of bread, meaning that he took the largest piece of bread, but we do not want to say that he necessarily deliberated (and decided in that sense) before he took the bread. Even if we want to insist that a minimum of deliberation is necessary for every action, I think that the above distinction between decision and intention can be made, as minimal deliberation could be, and is, distinguished from deliberation as defined earlier. The soldier who acts in response to a command intends to do whatever he does, but he cannot be said to have decided what to do, though he can be said to have decided to obey all the orders of the army before he joined it.

Considering now the statement "I can, if I choose", we can see that, if choosing is interpreted as being deliberation, decision or intention, then we cannot say that it is a sufficient condition for the ability to act. I can deliberate, decide or intend to do x without being able to do x. My deliberating, deciding or intending is a logically sufficient condition only for my believing that I am able to do x. If my choosing x is interpreted as _doing_ x (the fourth and fifth uses of "choosing"), then choosing is a sufficient condition for my ability to act, but it is a logically sufficient condition, as it follows in a rather obvious way that if I do x, I am also able to do x.

In the philosophical literature we can find arguments
of different forms, all of which, if correct, would show that
the statement "I can, if I choose" is not a causal conditional.
It has been argued either that the "if" of the above statement
is not the "if" of a conditional from which it would follow that
the statement is not a causal conditional, or that the statement
is not a causal conditional from which it has been inferred that
the "if" is not the "if" of a condition. It has also been argued
that choosing is not a condition, from which it would follow
that the statement in question is not a causal conditional. I
shall now turn to these arguments.

Conditional Analysis I

Brian Ellis argues that the "if" is not the "if" of
condition.[8] He suggests that the "if" in the statement "I can,
if I choose" can be replaced by "when". By substitution we
obtain the statement "I can when I choose". But Ellis thinks
that we cannot do this in the case of the conditional statement
"I'll come, if it rains". It does not appear, though, that
this particular argument supports Ellis's claim. If S says
"I'll come when it rains", he may be saying something diff-
erent from what he is saying in his claim that he will come
if it rains. But he seems to be claiming at least as much as
when he says "I'll come, if it rains". The if may not have the
force of when, because the term when is used to indicate a tem-

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[8]   B. Ellis, "I can, if I choose", Analysis, XII (1951-52),
    pp. 128-129.

poral relationship between the events referred to by the antecedent and the consequent; however, "when" will at least fulfil the function of the "if" of a condition though the latter may not always fulfil the function of the former.

Ellis's second argument consists of suggesting that we cannot replace the "if" in "I can, if I choose" by the term "although", whereas we can do that in the case of "I'll come, if it rains". But his second argument also fails to support his claim.

The fact that we cannot substitute "although" for "if" in the case of "I can, if I choose" does not show that my choosing to do x is not a sufficient condition for my being able to do x. The oddity of the expression "I can do x, although I choose to do x" may rest just on the fact that choosing in one sense _is_ a sufficient condition for my being able to do x. However, in this case we intend to assert the existence of a logical relation, and Ellis may want to claim that he had in mind a causal conditional.

But also in the latter case we cannot show that the "if" is not the "if" of a causal conditional just by showing that we cannot substitute "although" for "if". Consider for instance, the causal conditional "If I jump from a flying airplane, then I shall be killed". We seem to be just as reluctant to make a substitution here as on the previous occasion, whereas in the case of "I'll come, if it rains" we can make the substitution just because we assume that no kind of necessary condition is implied.

An argument against the thesis that <u>choosing</u> is not a condition for the ability of performing an act has been forwarded by Cuckoo.[9] He exhibits the following two statements:

1. I can, if I hurry.

2. I can, if I choose to hurry.

Cuckoo then suggests that the condition for the ability to perform the act is the same in (2) as in (1). This shows, he correctly suggests, that no new condition has been added in (2) by my saying that I <u>choose</u> to hurry. The examples show that on some occasions we may use "I choose to hurry" as an equivalent to "I hurry".

However, the examples do not show that choosing, in some sense of the word, is not a condition for the ability to act. Both statements "I can catch the bus, if I hurry" and "I can catch the bus, if I choose to hurry" is used here to refer to the act of hurrying rather than choosing apart from the action. Therefore, obviously, no new condition is added by saying "choose to hurry" in place of "hurry", though "choose to hurry" is informative in the way that it tells us that the agent is not <u>made</u> to hurry.

J. L. Austin has argued that "I can, if I choose" is not a causal conditional, and that the "if" is not the "if" of a conditional.[10] Austin supports his thesis by showing that

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[9] Cuckoo (pen-name), "I can if I choose", <u>Analysis</u> XII, (1951-52), pp. 126-128.

[10] J. L. Austin, "Ifs and Cans", <u>Philosophical Papers</u> (Oxford at the Clarendon Press, 1961).

the kind of inferences we can make from a causal conditional

differ from those which we can make from a statement of the

form "I can do x, if I choose to do x". Thus, he points out that

we can legitimately deny the consequent of a causal conditional

and infer the denial of the antecedent, but that we cannot do

this in the case of the above statement. We cannot infer from

"I can, if I choose" to "If I cannot, then I do not choose".

On the other hand, we can assert the consequent in "I can, if

I choose" irrespective of a denial or assertion of the antecedent.

I can say that I can do x, whether I choose to or not. Such an

inference is not possible, however, from a causal conditional.

There can be no doubt that the statement in question

as interpreted by Austin is not a causal conditional and that

his argument supports his thesis. While agreeing that Austin's

argument is valid, Kurt Baier points out, that Austin was mis-

taken in interpreting "I can, if I choose" as being a statement

about the agent's ability to act.[11] He suggests that Austin

was misled into this interpretation by considering statements

of the form "I could do x, if I _had_ an y", and that he did not

think of the possibility that the statement "I could, if I

chose" might be a statement about the exercise of the agent's

ability.

Baier first attacks Austin's view that the "if" in

question expresses doubt or hesitation by showing that there

is no doubt nor hesitation expressed by the statement "I could

have done x, if I had chosen". Baier correctly points out that

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[11]   K. Baier, "Could and Would", _Analysis_ XXIII (Suppl.
       Jan., 1963), pp. 20-29.

statements of this form imply that the action has already been chosen and that there can be no doubt nor hesitation on the part of the agent at the time when he makes the claim. Baier suggests that Austin may have made his mistake by considering the problematic statement in the present tense only. Thus it may seem plausible that "if" expresses doubt or hesitation in the case of "I can, if I choose", because the agent may as yet be in doubt about his future actions. But as this is not the case if we formulate the statement in the past tense, Baier infers that Austin's claim is incorrect.

Baier furthermore claims that "A could have done x, if he had chosen" entails that A would have done x, if he had chosen, because the statements "A could have done x, if he had chosen" and "A would not have done x, if he had chosen" are not compatible. Baier, then, goes on to argue that the "if" is an "if" of sufficient condition but not of necessary condition. In support of the first claim he says that "A could have done x, if he had chosen" is incompatible with "A might have done x, if he had chosen", pointing out that "A could have done x, if he had chosen" does not allow for the possibility that A is not doing x, if he chooses to do x. In support of the second claim he points out that, if we assume that the "if" indicates also a necessary condition, then we should be prepared to say that A's doing x was not possible without his choosing to do x. But, Baier claims, this we are not willing to do because we can do x without choosing, as for instance, when we do something

without thinking, or if we are "flattered into doing it".

Baier's analysis shows that it is plausible to interpret "A could have done x, if he had chosen" or "A can do x if he chooses" as being a causal conditional, but the analysis does not show that the statement "I can do x" entails, nor that it is entailed by a causal conditional of the above kind.[12] I shall now turn to the objections which have been raised against the view that the statement "I can do x" is equivalent to a causal conditional.

Conditional Analysis II

On the second kind of analysis "I can" is rendered as "I shall, if I choose". This analysis has been suggested by W. D. Ross, and P. H. Nowell-Smith, and it has been attacked by Austin, who argues in particular against Nowell-Smith's presentation of the analysis.[13]

Nowell-Smith attacks the view that "I can" is a categorical statement, as he thinks that such a view presupposes a mental state referred to by "I can". He claims that it is logically odd to say that: "Smith can run a mile, has had

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12   Other positive suggestions have been made with regard to the analysis of the meaning of the statement "I can, if I choose". Thus G. M. Mathews (Analysis XII (1951-52) pp. 131-132) thinks that the statement should be translated as "I can and nothing prevents me". D. Gasking (Analysis XII (1951-52) pp. 126-128) claims that the "if" clause is introduced to show that it would be unreasonable for me to do x, though I could do it.

13
      W. D. Ross, Foundations of Ethics, pp. 240-241. P. H. Nowell-Smith, Ethics, p. 278, J. L. Austin, "Ifs and Cans".

several opportunities, is passionately fond of running, has no medical or other reasons for not doing so, but has never in fact done so."

Austin shows that the above claim does not support Nowell-Smith's contention that "I can" means the same as "I shall, if I choose" in the following manner. He translates "logically odd" by "it is not the case" and he reformulates and symbolizes Nowell-Smith's claim in the following way:

Logically odd (ability (p) . opportunity (q) . motive (r) . non-action (-s)

$-(p . q . r . -s))$

Austin then points out that from these premises we can infer

1. $p \supset ((q . r) \supset s)$.

But he also points out that we cannot infer

2. $((q . r) \supset s) \supset p$

Therefore Nowell-Smith cannot claim that 'p' means the same as '$((q . r) \supset s)$'. Austin suggests that the claim may very well be correct and he acknowledges that he has only shown that Nowell-Smith has not provided a valid argument to support this claim.

However, Austin has also provided an argument with the intention to show that "I shall, if I choose" is not a causal conditional.[14] This argument has recently been criticized by Lehrer.[15] Austin had argued that "I shall" in "I shall, if I

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[14]   J. L. Austin, Philosophical Papers (London: Oxford University Press 1961), p. 162.

[15]   K. Lehrer, "An Empirical Disproof of Determinism", Freedom and Determinism, ed. K. Lehrer, (New York: Random House 1966), pp. 191-193.

choose" is not an expression of fact but of intention, and
that "if I choose" expresses a stipulation, i.e., a condition
for my intending to act in a certain way. Lehrer replies to
Austin by saying that Austin's own examples do not support his
thesis and that the context in which "I shall, if I choose" is
used shows the implausibility of Austin's contention. Thus
Lehrer points out that the statement with which Austin compared
"I shall, if I choose", namely, "I shall marry if I choose",
does not express the agent's intention. It is not equivalent to
"I intend to marry, if I choose" as Austin supposed, because
the context in which an agent would assert the statement in-
dicates that the agent's having or not having a choice is under
discussion. Lehrer acknowledges the fact that on some occasions
the form "I shall..., if" is used to express an intention, as,
for instance, when the agent says "I shall buy a boat if I get
a raise". Lehrer claims that in such cases the context of the
discussion is not the same as in the other, and that it would be
most peculiar to suggest that an intention has been expressed
in the case of the statements "I shall do x, if I choose to"
and "I shall marry him, if I choose to". Lehrer does not tell
us on what this peculiarity rests, but it is clear that we do
not consider choosing as being a condition for our intending
to do something, partly because we can intend to do something
without choosing, and partly because we cannot choose without
intending to do what we choose, as in the relevant sense of
"choosing", if I choose to do x, I close my deliberation with
the intention to do x. This does not mean, however, that we

never claim that choosing is a condition for our intending to
do what we chose to do.   Thus, somebody for instance may claim:
"If I choose to do x, then I intend to do x".   And though this
statement may seem to be analytic, it is not meant to be in
ordinary speech.   The statement is used to indicate that the
choice is final, but it is not used to announce an intention.
Therefore I conclude that Austin's attempt to show that the
statement "I shall, if I choose" does not represent a causal
condition has failed.

Lehrer himself adopts another line of argument against
this analysis of <u>can</u> statements.[16]   He employs the <u>reductio
ad absurdum</u> method in arguing that "I can" does not mean "I
shall, if " and that "I could" does not mean, "I should have,
if".   Thus he first assumes that:

I can = df.   I shall, if I choose. (1)

then by sustitution in

I can, if I choose. (2)

he gets the following equivalence:

I can, if I choose (2) ≡ I shall, if I choose, if

I choose. (3)

Then Lehrer says that the statement (3) has the form

If p, then, if p then q.

This he reduces to

If p then q.

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[16]   K. Lehrer, "Ifs, Cans and Causes", <u>Analysis</u> XX
(1959-60), pp. 122-124.

Therefore, according to Lehrer

I can, if I choose (2) $\equiv$ I shall, if I choose. (3a)

But this cannot be, because "I can" and "I shall" are not

equivalent. Therefore the assumption is false.

In a joint paper Bruce Goldberg and Herbert Heidelberger

have charged that this line of argument presupposes that "I

can, if I choose" is a conditional, and that Lehrer is not

entitled to this presupposition because he agrees with Austin

that the statement is not a conditional.[17] Lehrer's answer

to the charge is that one does not have to presuppose that

the statement in question is a conditional.[18] He claims that

the argument is sound on informal grounds. However, it seems

to me that Lehrer has not defended his position successfully.

The fact that he reversed the order of the terms of the

statement to be symbolized, and his claim that he can reduce

the statement "I shall, if I choose if I choose" to "I shall,

if I choose" appear to presuppose that the former statement is

a conditional. But even if we accept Lehrer's claim that the

reduction is acceptable on informal grounds, his argument does

not support his thesis. He is claiming that "I can, if I

choose" (2) cannot be equivalent to "I shall, if I choose (3a),

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17   "Mr. Lehrer on the Constitution of Cans", _Analysis_ XXI
      (1960-61), p. 96.

18   "Cans and Conditionals: A Rejoinder", _Analysis_ XXII
      (1961-62) pp. 23-24.

because "I can" and "I shall" are not equivalent. However this argument has some force only if it is presupposed that (2) and (3a) are conditionals, and Lehrer assumed that (2) is not a conditional. Lehrer has also never questioned whether or not (3a) is a causal conditional. Assuming that it is a conditional, and assuming that (2) is not a conditional one may have a reason to suspect that the statements in question are equivalent. I therefore conclude that Lehrer has not proved his point.

R. Taylor also rejects the thesis that the apparent categorical "I can" is translatable by the use of a causal conditional.[19] Taylor agrees that the hypothetical statements of the form "I shall do x, if I y" (where "y" can be replaced by the terms "try", "intend", "wish", and "choose", or where the conditional clause can be replaced by "if it suits my purpose" or by "if there is any point to it") are in ordinary language equivalent to "I can", but he does not think that such statements express causal relations.

In support of this claim he first suggests that if a man were asked why he did a particular action, and if he replied that he did it because he wanted to, we would recognize that an explanation has been refused. Taylor suggests furthermore that this argument can be used also with respect to all the other kinds of conditions referred to in the above hypotheticals.

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[19] R. Taylor, Action and Purpose (Prentice Hall, 1966), pp. 41-56.

Taylor's argument seems to be very plausible, but it supports his claim without reservations only in the case where the agent replies that he did x because he tried. An explanation is refused in this case because the agent's trying is part of his action. It is possible, however, to think of situations in which the agent is providing some explanation by saying that he did x because he intended, or chose, to do x or because it suited his purpose. For instance, if A cannot understand why his friend killed a man and he knows that his friend is not of the kind of men who go around killing people, he will receive some explanation if he is told that his friend wanted to do it. A will know then, that his friend was not forced to kill the man, though he will not know his friend's reasons for acting as he did.

Secondly, Taylor suggests that his claim is supported by the fact that we cannot, "in justice to common sense", consider the above hypotheticals as expressing causal relationships. However, this argument carries no weight as it is precisely the question what we do mean in the ordinary use of this expression which we want to clarify. In order to settle the question, we have to show that we do not express a causal relation when we assert such hypotheticals.

To support his thesis Taylor also provides the following argument. He points out that all of the above hypotheticals are equivalent in the ordinary language to "I can do x". Thus we have at least four hypotheticals which are equivalent

to "I can do x":

$$A \supset X$$

$$B \supset X$$

$$C \supset X$$

$$D \supset X$$

Taylor then infers from this that these hypotheticals are equivalent in meaning. But, he says, if we assume that A, B, C and D are states or events, as we have to do if the hypotheticals are causal conditionals, then we cannot say that they are equivalent to each other, because each of the conditions, A, B, C and D refer to a distinct event or state. Thus Taylor points out that "the events or states properly called 'trying', 'wishing', 'intending', 'having one's purpose', and so on, if these be regarded as events or states that might actually occur within me, are <u>not</u> the same".[20]

As the argument stands, it does not appear to have much force. To ensure success Taylor must show that the terms used in the conditional clauses of the different hypotheticals have not the same referent, but Taylor has not done this. An opponent to Taylor's view may very well argue that in the ordinary language the terms in A, B, C and D are used loosely and interchangeably and that all the hypotheticals express the same causal relation, i.e.,that they are equivalent causal conditionals.

Taylor's last argument in support of his claim that the hypotheticals in question are not causal conditionals relies

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20   R. Taylor, <u>Action and Purpose</u>, p. 51

on the assumption that we never observe causal relationships between the conditions, A, B, C and D and the supposed effects of these conditions. Taylor claims that "our entire <u>criterion</u> for saying what he wanted (or tried, or intended, or what not) to do, is what in fact he did".[21]

Again, it is not possible to accept Taylor's claim as it stands, because on many occasions we use criteria other than the performed act for judging that the agent intended or wanted to do that particular act. Thus, if the runner takes up his position at the starting line, we take this action as the criterion for his intention to run the race. If it is argued that the runner's walk to the starting line is already part of the act of running the race, we could go a step further and claim that his <u>saying</u> that he is going to run in the race is a criterion for his intending to run a race. Therefore it is very surprising that Taylor claims that we not only cannot say anything about the <u>agent's intention without observing his action</u>, but that we also do not infer from the agent's action to his intention. Taylor claims that the statement referring to the agent's action <u>entails</u> a statement referring to his intention. But it seems that this claim commits one to the view that intentions are part of our actions, and also that we never have unfulfilled intentions. This view, however, is incompatible with the fact that we often do not realize our intentions, and it cannot therefore be supported. Taylor's last argument there-

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[21] R. Taylor, <u>Action and Purpose</u>, p. 52

fore does not support his claim, and as none of Taylor's arguments are strong enough to support his claim that hypotheticals of the form "I shall, if I x" are not causal conditionals, I conclude that Taylor has not substantiated his claim, though this of course does not imply that these hypotheticals are causal conditionals.

But Taylor also claims not only that the above hypotheticals do not provide causal statements as equivalents to the statement "I can", but that no causal hypothetical can be a part or the whole of an analysis of this statement. He supports his claim on the grounds that a causal relationship can be expressed by a subjunctive hypothetical, whereas the meaning of "I can" cannot be expressed in this form. For instance, I could legitimately claim that if a brain event should occur, then my arm would move, but this would not express what I want to claim by saying that I can move my arm. Taylor points out that the subjunctive hypothetical may be true even in the case where I am claiming that I cannot move my arm.

Taylor also considers what follows from the hypothesis that "I can" expresses a causal relationship. He claims that if we assume that the hypothetical of the form "If y, then x" expresses the meaning of "I can", we then face the following dilemma. The event x has as its cause y, and y may be either an action or not an action. If the cause is an action, then I can ask whether I can do y, and if I say that I can do y then I am saying, according to the hypothesis, that I shall do y, if z. Thus we are led to an infinite regress. If, however,

we assume that the cause y is not an action but a mere cause, we cannot say that the effect is an action.

Taylor's dilemma has been attacked by D.M. Armstrong in a review of Taylor's book Action and Purpose.[22] He agrees that Ryle's infinite regress argument, as employed by Taylor, is a valid one, but he thinks that the second horn of the dilemma is not as sharp as Taylor would like to have it. Armstrong claims that we do have special causes of our acts in the form of purposes, and he offers the following definition of "purpose":

> A purpose or an intention is a state with causal powers that initiates and sustains lines of conduct by means of beliefs about and perceptions of the world.[23]

He suggests that purposes cause acts in a manner similar to compelled acts, and that we have a non-inferential awareness of such causes similar to the awareness of pressure. Armstrong considers these causes as being "information sensitive" and it seems to me that the introduction of this notion indicates that Armstrong wants to distinguish between two different kinds of causes. Armstrong, has not as yet made his position known to the public and the few suggestions offered as an invitation to his forthcoming book do not allow one to evaluate his view.

Taylor's position, it seems to me, could be defended by saying that compelled acts are not caused acts in the sense of "cause" which is used in Taylor's dilemma, and that therefore

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[22] D. M. Armstrong, "R. Taylor, Action and Purpose", Australasian Journal of Philosophy 46, (Aug. 1966), pp. 231-240.

[23] Ibid., p. 234

Armstrong's analogy between compelled acts and caused acts does not help him to establish his position. Taylor of course holds that acts are caused in some sense, but not in the sense which we use in talking about caused events as distinct from actions. Taylor's position appears to be sound provided we grant him his distinction between events and acts.

Another attempt to show that no causal conditional can be a part or the whole of the analysis of "I can" has been made by Lehrer.[24] Lehrer's method consists of showing that a causal conditional which supposedly represents the statement "S can do x" is compatible with premises which entail that S cannot do x. From this he infers that the causal conditional is also compatible with the statement "S cannot do x", and that therefore the causal conditional cannot entail the statement "S can do x". From this it then follows that the causal conditional cannot express the meaning of "I can do x".

To illustrate Lehrer's procedure I shall take his own example.

1.   If S is not chained, then S will move

2.   If S is chained, then S cannot move

3.   S is chained

4.   S cannot move   2, 3, M.P.

Premise (1) is said to be a causal conditional with the proviso that S wants to move. Premises (2) and (3) are claimed to be compatible with premise (1). The conclusion (4) follows from

24   K. Lehrer, "An Empirical Disproof of Determinism", Freedom and Determinism, ed. K. Lehrer (New York, Random House, 1966), pp. 175-202.

(2) and (3). Using the principle that if P is consistent with Q and Q entails R, then P is consistent with R and inconsistent with -R, given that (1) is P, the conjunction of (2) and (3) is Q, and (4) is R, Lehrer then infers that (1) does not entail the negation of (4), i.e., the causal conditional does not entail that S can move.

Bruce Aune criticizes Lehrer's argument in a recent paper claiming that Lehrer has not supplied any reasonable grounds for saying that the premises _are_ compatible.[25] Aune suggests that the man who supports the analysis of "can" in terms of a causal conditional may equally well assume that the premises are not compatible. Aune claims that one may suspect that the premises (2) and (3) are not compatible with the causal conditional just for the reason that they entail the contradictory of that which premise (1) on a conditional analysis is supposed to entail, namely, "S can do x".

Aune's criticism is a fair one but it seems to me that it is possible to raise even stronger objections to Lehrer's procedure. I think it is possible to show that Lehrer's argument is not acceptable because in his use of the term "can" he presupposes an analysis of the term which conflicts with the proposed conditional analysis.

I shall first set out Lehrer's argument in general terms:

1. If condition C obtains, then S will do x
2. If condition C does not obtain, then S cannot do x
3. Condition C does not obtain

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25   B. Aune, "Hypotheticals and 'Can': Another Look", _Analysis_, XXVII (1967), 191-195.

Therefore,

4.   S cannot do x

In asserting the second premise Lehrer clearly presupposes that the absence of the condition C is causally sufficient for S's not doing x. In other words, Lehrer presupposes that if the condition C does not obtain then S does not do x.

In addition, the second premise is not acceptable without a further justification. One would have to show that it is the case that if a sufficient condition for S's doing is absent S not only does not do x, but that S also cannot do x. Now, it is possible to use some principle to infer premise (2) from the suppressed causal conditional. For instance, we could use the principle that if the absence of a condition is sufficient for S's not doing x, then S cannot do x. The possibility that Lehrer has presupposed such a principle in his argument is suggested by the fact that he provides us with a definition of causal impossibility which could be easily modified to give us such a principle (Lehrer's definition: "It is causally impossible for something to happen if and only if there exist antecedent conditions sufficient to cause it not to happen".)[26] Lehrer's argument would have then the following form:

1.   If condition C obtains, then S will do x

1a.   If condition -C obtains, then S will not do x

1b.   If condition -C is sufficient for S's not doing x, and -C obtains, then S cannot do x

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[26]   K. Lehrer, "An Empirical Disproof of Determinism", p. 190.

1c. If condition -C is sufficient for S's not doing
     x, then if -C obtains, S cannot do x

2.   If -C obtains, then S cannot do x

3.   The condition -C obtains

Therefore,

4.   S cannot do x

In the above argument premise (2) follows from (1a) and
(1b). (1c) is equivalent to (1a) according to the Rule of
Exportation. (1a) is the suppressed causal conditional, and
(1b) is a principle which could be used to arrive at premise
(2).

However, regardless of the procedure by which Lehrer may
have arrived at his premise (2) we can raise the previously men-
tioned objection, namely, the objection that Lehrer has pre-
supposed an analysis of "I can" which conflicts with the con-
ditional analysis.

The situation appears to be the following one. Both
Lehrer and the supporter of the conditional analysis of "can"
assume that we can find causally sufficient conditions for our
actions. But Lehrer in his argument uses the term "can" in a
way which allows us to assert that if S can do x, then S does
x. That this follows from Lehrer's premises can be shown by
continuing the above argument:

4.   If S can do x, then the condition C obtains
     (From (2) by Transposition)

6.   If S can do x, then S will do x
     (From (1) and (5) by Hypothetical Syllogism)

However, on the conditional analysis we are entitled to claim
only that if S can do x, then it is the case that S will do x,

<u>provided</u> that the condition C obtains.

Therefore a supporter of the conditional analysis may reasonably claim that Lehrer in his argument against the conditional analysis is already presupposing an analysis of "can" which is not compatible with the analysis suggested by his opponent. I conclude, then that Lehrer's argument fails to show that "S can do x" is not entailed by a causal conditional of the form "S will do x, if ...", from which it follows that he has not shown that an analysis of "I can do x" in terms of a causal conditional is impossible.

I therefore also conclude that most of the arguments against an analysis of "S can do x" in terms of a causal conditional have not shown that an analysis of this kind is impossible. However, I think that Taylor's argument against a causal analysis of the above expression which I considered earlier carries enough weight to render such analysis very implausible.

CHAPTER II

TAYLOR'S ANALYSIS OF "CAN" STATEMENTS

Having considered, in the previous chapter, several attempts to analyze the "can" of human agency in terms of a causal conditional I shall now investigate Taylor's analysis of "can" statements, and his use of the phrase "within my power". I shall also attempt to provide an account of our use of modal terms, because Taylor, in his analysis of "can" employs modal terms, and because some of Taylor's critics have presupposed that power statements are modal statements to which we may apply generally accepted rules of modal logics. Without some understanding of our use of modal terms the position of Taylor and that of his critics therefore cannot be evaluated.

Taylor's Classification of "Can" Statements

Taylor claims that we can distinguish between three distinct uses of the term "can". Thus, in some statements "can" is used to express the idea of contingency, and in these statements we may, according to Taylor, substitute the term "might" for the term "can" without incurring a change in meaning. For example, we could say that a desk can have white color, meaning that it might have white color, and Taylor claims that the term "might" means "might and might not".

The second use of "can" is found in statements expressing causal capacity. For instance, if we say that water can dissolve sugar, we are asserting that water has the capacity to dissolve sugar, but we do not intend to say here that water might dissolve sugar.

In its third use, according to Taylor, the term "can" expresses the power of human agency. Thus, if I say that A can open a certain door, I am claiming that A has the capacity to open the door. But Taylor claims that the term "can" does not express on this occasion the same kind of capacity as it expresses on the occasion of our use of the term with respect to inanimate things.

Having outlined the basic distinctions which have been made by Taylor with respect to our use of the term "can" I shall turn to a closer analysis of these distinctions. But, before turning to Taylor's contingency sense of "can" I shall first discuss our use of modal terms in general.

Modal Terms and the Idea of "Contingency"

The group of the basic modal terms consists of the terms "necessary", "impossible", "possible" and "contingent", and we use these terms in statements such as "It is possible that S is doing x", "Necessarily the triangle has three sides", and "It is impossible that salt is not soluble". The term "possible" deserves special attention as it is used sometimes in a wider sense and sometimes in a narrower sense. In the latter use, which is also the ordinary use, it is equivalent to the term "contingent". This kind of possibility has been also called two-sided possibility, because if a statement is possible in this sense, then we can legitimately infer that the negation of the statement is also possible, whereas we cannot make this kind of inference if we use "possible" in the wider sense.[27]

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27   I. M. Bochenski, A History of Formal Logic (Notre Dame, Indiana: University of Notre Dame Press, 1961) pp. 82-85.

In this latter sense of "possible" a statement may be either a contingent or a necessary statement. This kind of possibility has been sometimes called "one-sided possibility", for the reason that we cannot infer from the fact that p is possible that not-p is also possible.

The Logical Relations of Modal Terms

The logical relationships between the basic modal terms can be shown by taking, in turn, each term as a primitive term and by defining the remaining terms by the use of the primitive term. Given that "p is possible"= "Pp", "p is necessary" = "Np", "p is impossible" = "Ip", and "p is contingent" = "Cp", we arrive, then, by adopting the above procedure at the following four sets of definitions:

a)
$$Ip = -(Pp)$$
$$Np = -(P-p)$$
$$Cp = (P-p).(Pp)$$

b)
$$Pp = -(Ip)$$
$$Np = I-p$$
$$Cp = -(Ip).-(I-p)$$

c)
$$Pp = -(N-p)$$
$$Ip = N-p$$
$$Cp = -(Np).-(N-p)$$

d)
$$(P-p . Pp) = Cp$$
$$-(Ip . -(I-p) = Cp$$
$$-(Np . -(N-p) = Cp$$

It is possible also to arrange the modal terms around the square of opposition, provided that we make an adjustment which is needed to show how the term "contingent" is related to other modal terms:
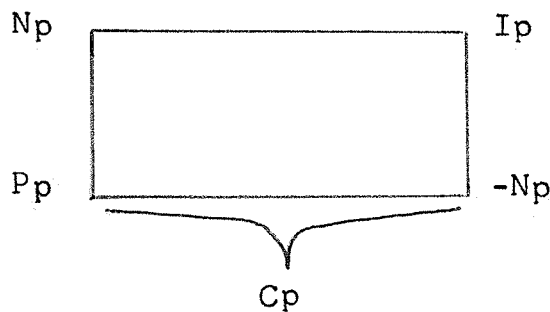
In the above diagram we see exhibited the same relations which hold in the traditional square of opposition with the additional fork below indicating that the relation of equivalence holds between the conjunction of the sub-implicants and the expression at the base of the fork.

Modal Terms and States of Affairs

One of the problems which we encounter in considering our use of modal terms is that it is not quite obvious whether we are saying something about a state of affairs or whether we are saying something about the statement expressing this state of affairs when we claim that it is possible (impossible) that S is doing x. But before proceeding with the discussion of this problem the notion of state of affairs itself needs some clarification.

One of the ways in which we can clarify this notion is to say that a state of affairs is that which is expressed by a statement, or, taking the descriptive statement as the paradigm case of statements, we can say that a state of affairs is that which is described by a statement and that statements describe states of affairs. The major distinction made here is that between language and the world, the language being used as a symbolic device for the representation of the world. However this model of the relationship between statements and the world involves us in the difficulty of having to give an account of those states of affairs which are expressed by either false or negative statements.

It is quite easy to deal with the negative statements,

such as "S is not doing his work", as every false negative statement is equivalent to a true statement and as every true negative statement is equivalent to a false statement. Thus if S is not doing his work, then it is false that S is doing his work, and if it is false that S is not doing his work then it is true that S is doing his work. However we still have the problem that we are committed to the view that false statements express a kind of state of affairs. The problem is that if we think of states of affairs as being actual situations in the world, then, while it is easy to see that true statements are symbols of the situations in the world, it is not at all easy to say what kind of situations are represented by false statements. One solution to this problem is to distinguish between actual and non-actual states of affairs, and I shall adopt this solution. The resulting model of the relation between the statements and the world can be represented graphically as follows:

Non-actual states of affairs	Actual states of affairs
False (or true negative) statements	True (or false negative) statements

It is important to note that in this context the term "actual" is not used in opposition to the terms "past" and "future", i.e., the term is not used as a synonym for "present". It is also clear that the non-actual states of affairs do not have the same ontological status as the actual states of affairs, though the above model does not offer any information as to what

status they do possess. I shall adopt this conceptual frame-
work as a useful tool without a further discussion of the
status of non-actual states of affairs.

Returning now to the analysis of the statement "It is
possible that S is doing x at the time t", the initial question
as to whether the modal term is used to say something about a
state of affairs or whether it is used to say something about
the statement can be widened. We can ask the same question
with regard to modal terms in general. The answer to this
question is that there is a great variety in the use of modal
terms within both the ordinary and the philosophical discourse,
and that some modal terms are sometimes used with reference to
states of affairs, whilst at other times they are used as meta-
linguistic terms. J. Hospers, for instance, uses the term
"possible" and "impossible" with reference to states of affairs,
reserving the terms "necessary" and "contingent" for state-
ments.[28] H. Reichenbach however claims that all modal terms
have two distinct kind of uses. First he claims that all modal
terms can be used as meta-linguistic terms:

> Finally, we may incorporate into the semantical terms
> of the metalanguage the modalities, i.e., the terms
> necessary, possible, impossible. These terms qualify
> sentences; in fact their precise meaning can be defined
> only in the metalanguage, as will be shown in chapter
> VII. We shall therefore construe, in this interpre-
> tation, the sentence 'Peter will possibly come' as
> meaning that the sentence 'Peter will come' is possible.[29]

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[28]   J. Hospers, An Introduction to Philosophical Analysis,
2nd. ed., (Englewood Cliffs, N.J.: Prentice-Hall, 1967),
pp. 169-186.

[29]   H. Reichenbach, Elements of Symbolic Logic, (New York:
The Macmillan Company, 1947), p. 348.

Reichenbach also claims that modal terms are used in the object language, i.e., that they are used with reference to facts or situations. However within his theory the facts and the situations are of a special kind. They are not the same as what I have called "actual states of affairs".

> When used in the object language it [the term "possible"] is applied to fictitious objects. Referring to the earlier example we may say that Peter's coming is possible. The event denoted by the phrase 'Peter's coming' is then regarded as belonging in a realm of fictitious existence; the objects of this realm are divided into real (or necessary), possible, and impossible objects.[30]

Hosper's use of the modal terms seems to do justice to the ordinary use of language, as we usually do not say that statements are possible, but that states of affairs are possible, and as we perhaps only seldom say that events are necessary or contingent. But, then, on the other hand ordinary language is not concerned with ascribing necessity or contingency to statements. This use of modal terms is a more technical one, belonging more to the philosophers' discourse than to the ordinary language.

However, though in the ordinary speech we do not seem to employ frequently the term "necessary" to characterise a particular state of affairs, we use other terms to express the same idea. We say that something is inevitable or unavoidable. Similarly, though we do not usually say that a particular table is contingently red, we do say that this table could have been other than red or that a particular tree might have been of a

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[30] Ibid., p. 348.

different shape. Thus Hosper's use of modal terms should not lead one to assume that some modal terms cannot be used in the object language, nor that some cannot be used in the meta-language.

Reichenbach's claim that all modal terms can be used both within the object language and the meta-language appears to be reasonable. Nevertheless, it is not immediately clear what Reichenbach might have meant by saying that modal terms qualify sentences.[31] It does not seem too helpful to say that a statement is possible without a further explanation, and the same could be said about the statements "The statement p is necessary" and "The statement p is contingent".

It seems to me that such expressions are best inter-preted as being elliptical assertions about the truth-value of statements. On this interpretation the statement "p is possible" should be expanded to read "p is possibly true". Similary, the statement "p is necessary" should be expanded to "p is necessarily true", and other modal terms can be treated in the same manner. Such an adverbial treatment of modalities can be found in G. H. von Wright's discussion of modalities.[32] He suggests that we say that a proposition is necessarily, possibly or contingently true when we "consider the modes in which a proposition is (or is not) true.[33]

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[31] H. Reichenbach uses the terms "sentence", "statement" and "proposition" interchangeably.

[32] G. H. von Wright, An Essay in Modal Logic (Amsterdam: North-Holland Publishing Co., 1951).

[33] Ibid., p. 1.

Reichenbach's other claim, namely, that modal terms in the object language are used to refer to fictitious objects, deserves also some attention. This point of view seems plausible when we think of impossible or even possible states of affairs or objects. After all, we do not want to claim that we can touch impossible or merely possible objects, nor that we can perceive impossible or possible states of affairs. However the plausibility of this view is diminished when we predicate necessity of a state of affairs. Thus when I say that the sum of the angles of a particular triangle is necessarily 180 degrees, I intend to refer to an actual triangle, though it could be argued that only the "ideal" triangle possesses this particular necessity. But if I say that somebody's death was a necessary result of the lack of oxygen in the room, I do not intend to say something about a fictitious state of affairs but I do intend to say something about an actual state of affairs.

One could reasonably claim that the non-actual but possible states of affairs are in a sense fictitious states of affairs, but it seems that Reichenbach has inferred from this that modal terms could never be applied to actual states of affairs. It is easy to think, however, of circumstances in which we do apply even the term "possible" to an actual state of affairs. For instance, if someone should doubt that A can lift 200 kilograms, I can point out to him that A did lift 200 kilograms yesterday, and I can go on to say that if it was possible for A to do it once, he could probably do it again.

When I point out that this particular event was possible, I certainly do not refer to any fictitious state of affairs. Therefore Reichenbach's second claim is not acceptable.

Returning now again to the problem of interpretation of statements of the form "It is possible that p" I shall discuss it by considering what von Wright has suggested with regard to modal statements of the above grammatical form.

Within the use of the modalities of truth von Wright distinguishes between their use de dicto and de re:

> The alethic modalities [modes of truth] are said to be de dicto when they are about the mode or way in which a proposition is or is not true.[34]

> The alethic modalities are said to be de re when they are about the mode or way in which an individual thing has or has not a certain property. [35]

The distinction which has been made here seems to correspond to the distinction made between the use of modal terms in the object language and their use in the meta-language. However von Wright goes on to suggest that statements of the form "It is necessary that p" or "It is possible that p" indicate by their grammatical form that the modal terms are used to say something about the statement p rather than about the state of affairs expressed by the statement p. Furthermore he suggests that the form of the statement "S is necessarily P" indicates that the modal term is used to say something about a state of affairs.

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34   Ibid., p. 8.

35   Ibid., p. 25.

Now, while the form of the statement "S is necessarily P" seems
to indicate that the modal term belongs here to the object
language, it does not seem that the form of the statement "It
is necessary that p" indicates a clearly recognizable use of
the modal term in the meta-language.

In some molecular statements the connective "that" seems
to indicate the presence of meta-linguistic terms. For instance,
if I state that S says that the tree is green, it is correct
to interpret my statement as having the form "S says 'the tree
is green'". The same could be done with statements of the form
"S doubts that p", "There is no question that p" and "It is
known that p". However, let us consider the following state-
ments:

1. I am delighted that Peter is here.

2. It is dreadful that you don't love me any more.

It seems that the above statements cannot be interpreted as
containing meta-linguistic expressions. These statements do
not lend themselves to this interpretation because in both
statements we are not concerned with the atomic statement
which follows the connective, but rather with the states of
affairs expressed by the atomic statement. For instance, what
I am delighted about is Peter's being able to visit me and not
the statement expressing this fact.

These cases show that not all molecular statements con-
taining the connective "that" are to be interpreted as con-
taining a statement in the meta-language, and that it is at

least an open question what interpretation we should give to modal statements having the form "It is possible that ...." Furthermore, if the ordinary use of the language is taken as a criterion it seems that in such statements the modal terms belong to the object language. It would therefore be incorrect to say that in statements of the above grammatical form modal terms are used _de dicto_ only.

Nevertheless, it appears that both interpretations are equally legitimate, and that one interpretation will be materially equivalent to the other. Thus I conclude that for the purpose of analysis the statement "It is possible that p" may be legitimately translated into "'p' is possible", and that statements of this form may be legitimately symbolized as P(p), where P stands for "possible".

So far I have only considered our use of modal terms in statements of the form "It is possible that....", however; our use of modal terms is not confined to statements of the above form. We often also say that something is _possibly or necessarily_ so, or that it is _possible for_ something or somebody to do this or that. For instance, we say that Smith is possibly a very nice person, and we also say that it is possible for Jones to do twenty push-ups, or that it is possible for a particular car to travel at a speed of twenty miles per hour.

Considering first the statement "Smith is possibly a nice person" it is obvious that we do not intend to assert that Smith has the property of being a possibly nice person, because there are no properties called "possibly nice". We also

do not intend to say in this statement that Smith has the property of being periodically nice in spite of his being a predominantly nasty person. What we intend to say in the above statement is that it is possibly true that Smith is a nice person. Therefore no new problems are presented by modal statements of this particular form.

However our use of modal terms in statements of the form "It is possible for..." seems to differ from our use of these terms in statements of the form "It is possible that...." For instance, the statement "It is possible for this car to travel at the speed of two hundred miles per hour" does not express what we intend to say by the statement "It is possible that this car will travel at the speed of two hundred miles per hour", because we may say that it is not possible for a car to travel at this high speed and assert at the same time that it is possible that the car will travel at that speed. We are claiming in this case that the capacity of the car is such that if I depress the accelerator as far as I can, the car will not develop this particular speed, but that at the same time we can conceive of circumstances in which the car will travel at such a high speed. The winds may, for instance, be strong enough to make it travel at this speed.

Similarly within the context of human action, I may say that it is not possible for me to open a certain door, because it is locked and the key to the door is controlled by a man standing on the other side of the door. However it is possible that I shall open the door, because the man may decide to un-

lock the door. Now, this seems to be a case in which I may claim that it is not possible for me to open the door, though it is possible that I shall open the door.

I conclude, therefore that the difference in the grammatical form exhibited by such statements is indicative of an important logical distinction. I shall however interrupt my analysis of this distinction here to resume it later in a discussion of the expression "It is within my power", and I turn now to a discussion of some of the distinctions which have been drawn between different kinds of modalities.

Logical and Non-logical Modalities

Within philosophical discussions we find that it is the accepted practice to distinguish between logical and empirical modalities. This distinction rests on the observation that it is, for instance, possible (in one sense of "possible") to have a universe in which men do not die and where ordinary glass does not break, whereas it is clearly impossible (in another sense of "possible") for men to be immortal and for ordinary glass to be unbreakable. What is possible in fairy tales is often not possible in our world.

It is also customary to define logical modalities as follows:

Np = p is a tautology or an analytic statement, i.e.,

p may be true either in virtue of its form or its meaning.
E.g., If the ball is red, then the ball is red.
Bald men have no hair.

Ip = p is a logically inconsistent or self-contradictory

statement.
E.g., Smith is on the roof and Smith is not on the roof.
This boy is a girl.

Cp = p is a synthetic statement.
E.g., This flower is red.

Pp = p is not a self-contradictory statement.

p in this case may be either a tautology or a contingent statement.

The above interpretation of modalities is quite acceptable and very useful from the point of view of a logician or a philosopher. However, in the ordinary situation we seldom use modal terms with the above interpretation, i.e., when we say that something is possible or necessary we seldom are referring to logical possibility or necessity. Thus, the explorer at the north pole may say that it is impossible to save his friend who has fallen through the thin ice, because the ice is too thin to support any would-be rescuer. He will, however not think it worthwhile to contemplate that his friend will necessarily either die or survive the accident.

Though we know that there is a marked difference between logical possibility and empirical possibility, in the ordinary use of language we do not seem to give a special name to the non-logical possibility. However, in philosophical writings several names have been used to indicate that a particular discussion is not concerned with logical possibility. Most frequently we encounter the terms "physical possibility", "empirical possibility" and "causal possibility", and I shall discuss the use of these terms.

Empirical Modalities

John Hospers says this about empirical possibility:

> A state of affairs is empirically possible[36]
> when it is not contrary to laws of nature.

Using the previously introduced notations and the subscript "e"
for "empirically" this explication can be symbolized in the
following way:

$P_e p$ = "p" is not a statement which is contrary to a law
of nature.

Given the previous definitions of modal terms we can derive the
following explications for the remaining modal terms:

$I_e p$ = "p" is a statement contrary to a law of nature.

$N_e p$ = "-p" is a statement contrary to a law of nature.

$C_e p$ = "It is false that p is contrary to a law of nature,
and it is also false that -p is contrary to a law
of nature.

Empirical possibility is sometimes also referred to as
"physical possibility". H. Reichenbach has, for instance,
supplied us with the following definitions of physical modalities
which are similar to the previous definitions of empirical modal-
ities.

p is physically necessary   = df. 'p' is a nomological statement
p is physically impossible = df. '-p' is a nomological statement
p is physically possible   = df. neither 'p' nor '-p' is a nomo-
logical statement[37]

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[36] J. Hospers, An Introduction to Philosophical Analysis,
(Prentice Hall Inc., 1967) p. 170.

A statement is called a natural law if it is a true
synthetic statement of unrestricted generality.

[37] H. Reichenbach, Elements of Symbolic Logic (New York:
The Macmillan Company, 1947).

Reichenbach uses "physically possible" in place of "physically contingent" in order to conform with the ordinary use of language, and he does not supply us with a definition of "physically possible", where "possible" is used to refer to one-sided possibility. However such a definition is easily derived from Reichenbach's set of definitions. We can infer from the given fact that "p is physically impossible" is equivalent to "-p is a nomological statement", that "p is possible" is equivalent to "It is false that -p is a nomological statement". By "nomo- logical statement" Reichenbach in this context means a synthetic statement expressing a law of nature.

Adopting this view of empirical modalities we could take any statement representing a law of nature to illustrate our use of this kind of modal terms. Thus if we assert that all men are mortal we can say, complying with the above definitions that it is impossible that there is a man who is immortal. Similarly, given the law that the melting point of ammonia is -77.7 degrees centigrade, we may say that it is impossible that there is ammonia which is going to melt at -66.6 degrees. Again, given the law that friction causes heat we can infer that it is impossible that there are instances of friction without heat. (The last example differs from the first two in that the first laws affirm a uniform connection of attributes, whereas the last one asserts a uniform connection of events).

If we use these definitions of empirical modalities we cannot however attribute empirical possibility, impossibility, or necessity to many events or states of affiars. Thus if we

say that all men are mortal, we may infer that it is impossible
that no men are   mortal, or that it is impossible that it is
not the case that there is a man who is mortal, or that it is
impossible that there is a man who is not mortal We cannot
however say in keeping with these definitions of empirical
modalities that it is impossible that A is immortal. Let us
consider the following argument:

    1.   All men are mortal   (L)

    2.   A is a man   (p)

Therefore,

    3.   A is mortal   (C)

Given that "L" represents a law of nature, "p" is a statement
expressing a matter of fact and "C" is the conclusion of the
argument, we can represent the argument as follows:

$$(L.p) \supset C$$

Given this argument we can show that -C is incompatible with
the conjunction (L.p), but we cannot show that -C is incom-
patible with L without p being given, and therefore we cannot
infer that it is impossible that -C.

However, given the previous definitions we may say that
it is impossible that A is an immortal man (symbolically: I(p.-C).
To see that this assertion conforms to the previous definitions
of the empirical modalities let us consider the following.
$(L.p) \supset C$ is equivalent to $L \supset (p \supset C)$, but the denial of $p \supset C$ im-
plies the denial of L. Therefore $-(p \supset C)$ is contrary to a law
of nature, i.e., it is empirically impossible. But $-(p \supset C)$ is
equivalent to (p.-C). Thus we can say that it is impossible

that (p.-C), i.e., it is impossible that A is a man and that
he is immortal.

We arrive at similar results if we choose a causal law
as the law of nature in an argument of the above form. Thus,

$$((c \text{ causes } e) \cdot c) \supset e$$

is equivalent to

$$(c \text{ causes } e) \supset (c \supset e)$$

But the denial of $(c \supset e)$ is contrary to the law that c causes e,
and we infer that

$$I -(c \supset e)$$

which is equivalent to

$$I(c.-e)$$

However, we cannot say that -e is empirically impossible, be-
cause -e is incompatible with "c causes e, and c" but not with
"c causes e".

Hospers seems to use empirical modalities in this way,
judging by his examples. Thus he says that "it is empirically,
not logically, impossible for you to jump out of a tenth story
window _and_ not go downward".[38] It is however surprising that
he does not want to hold that the laws of nature themselves are
necessary in any sense of "necessary". Within his discussion
of causality, for instance, he emphasizes that the empirical
laws are "non-necessary".[39] According to the above definitions

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[38]   J. Hospers, _An Introduction to Philosophical Analysis_, p. 170.

[39]   _Ibid._, p. 283

of empirical modalities, we ought to be able to infer, however,
that the laws of nature themselves are necessary. Given that
L represents a law of nature, and given that $L \supset I(-L)$, we can,
recalling the previously produced relations between basic modal
terms, infer that $N(L)$. But Hospers claims that the necessity
which we attribute to particular events or states of affairs
or to law-like statements is to be interpreted as being the
logical necessity which we find in a deductive argument.
Thus he says:

> The conclusion of a deductive argument can always be
> prefaced with the word "must", to indicate the con-
> clusion logically follows from the premises. The
> danger is that we are apt to put in the "must" and
> then forget about the empirical premises from which
> the conclusion is deduced. Thus we say "Stones must
> fall", "Water must go downhill," "Organisms must die",
> and so on, forgetting that these are not necessary
> statements at all, but that they can be deduced from
> general laws of nature. These general laws of nature,
> however are empirical; and the conclusion can be
> called necessary only with respect to these non-
> necessary empirical laws.[40]

To support his position he gives us an example of a valid but
unsound argument, claiming that here, too, the conclusion is
necessary only in the sense that it follows validly from the
premises:

> If all reptiles are green and my dog is a reptile,
> then it must be that my dog is green.[41]

It is clear that in this particular case we are willing
to claim that the term "must" indicates only a logical necessity,

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[40]   <u>Ibid</u>., p. 283.

[41]   <u>Ibid</u>., p. 283

however this is not what we mean when we claim that water
must go downhill, or that stones must fall. In the case of this
valid but unsound argument we are willing to claim that it must
be that the dog is green, only because we make it clear that
the necessity is attributed indirectly to the argument in
virtue of its valid form. However we are not willing to claim
that the dog is necessarily green in any other sense of "nec-
essarily" just because the argument is not sound. Only if the
premises were true, we would be willing to attribute empirical
necessity to the conclusion.

Hospers' position does not seem to be consistent. Surely,
if he wants to say that it is empirically impossible for water
to flow uphill, then he also has to allow that it is empirically
necessary that water does not flow uphill. He cannot claim that
the necessity referred to in the statement "Water must flow
downhill" is just a camouflaged logical necessity.

Causal Modalities

In the ordinary language modal terms are used to refer
to empirical necessity, impossibility or possibility in two
different ways. For instance, we say that it is impossible
for A to drink cyanide <u>and</u> to go on living, <u>because</u> the drinking
of cyanide ensures or causes death. And we also say that it is
impossible for A to go on living, <u>because</u> A drank cyanide, <u>and</u>
drinking cyanide causes death.

The previous definitions of empirical modalities do
justice to the first of these two uses of modal terms, though

they are not adequate for the second use of the modal terms.
But we can find definitions in the philosophical literature
which conform to the ordinary use of modal terms exemplified
in the second statement above. Both Taylor and K. Lehrer have
provided definitions of this kind, and they call the possibility,
impossibility, and necessity in question "causal possibility,
impossibility and necessity".[42] As both Taylor and Lehrer
provide the same kind of definitions I shall consider only
Taylor's discussion of causal modalities.

Taylor has this to say about causal modalities:

Something is in a perfectly familiar sense, causally
impossible if there exist conditions sufficient, but
not logically sufficient for its non-existence, or for
the existence of something causally incompatible with
it.

To say, then, that something is contingent in this
causal sense is equivalent, by our definition, to
saying that neither its occurrence nor its non-
occurence is in this sense impossible or that existing
conditions are causally sufficient neither for its
occurence nor its non-occurrence - in short, that it
is uncaused.[43]

I think that Taylor's definitions of causal impossibility can
be adequately represented in the following way:

$$Ip = (\exists x) \ (x \text{ is an event} . x \text{ causes } -p)$$

From this equivalence we can derive definitions for the other

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42	N. K. Lehrer's definition can be found in his article
"An Empirical Disproof of Determinism?" contained in
the book Freedom and Determinism, ed. K. Lehrer, p. 190.

43	R. Taylor, Action and Purpose, p. 44.

modal terms

$$Pp = -(\exists x) [x \text{ is an event } . \text{ x causes } -p] \text{ or } (x) [x \text{ is an event } (x \text{ causes } p)].$$

$$Np = (\exists x) [x \text{ is an event } . \text{ x causes } p].$$

$$Cp = (\exists x) [x \text{ is an event } . \text{ x causes } -p], \text{ and } -(\exists x) [x \text{ is an event } . \text{ x causes } p],$$

or,

$$(x) [x \text{ is an event } \supset -(x \text{ causes } -p)], \text{ and } (x) [x \text{ is an event } \supset -(x \text{ causes } p)].$$

Taylor himself has not provided us with definitions of causal possibility and causal necessity; however the above definitions follow from his definition of causal impossibility.

These definitions appear to represent adequately our use of modal terms only with respect to uniform connection of events. It would be misleading to say that it is _causally_ impossible that A is immortal, because all men are mortal and A is a man. Therefore we need a term which would characterize this particular use of modalities, as represented by the definitions of causal modalities, as well as attributes. Reichenbach distinguishes therefore between absolute physical modalities and relative physical modalities.[44] Reichenbach's absolute physical modalities correspond to our empirical modalities and his relative physical modalities correspond to the causal modalities in the wider sense.

We could, for brevity's sake, call the modalities referred to in statements such as "It is impossible for A to be

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44   H. Reichenbach, _Elements of Symbolic Logic_, pp. 393-396.

immortal" and "It is impossible for A to live more than two
hours", "factual modalities", in contrast to the empirical
modalities considered earlier. Thus the distinction made
between the two uses of modal terms would be marked by the
terms "empirical modality" and "factual modality", though
in a wider sense of the term "empirical" both kinds of
modalities are empirical.

Having surveyed the important distinctions which are
made with respect to our use of modal terms, I shall now resume
my discussion of Taylor's analysis of "can" statements, directing
my attention primarily to his analysis of the term, as it is used
with respect to human action.

Taylor's Contingency Sense of "Can"

Taylor claims that we can distinguish between three kinds
of contingency: logical, causal and epistemic, and he illustr-
ates these distinctions by the use of the following examples:

1. A triangle can be acute (logical contingency).

2. (Lucretius thought that) atoms can swerve from
    their paths (causal contingency).

3. This can be the restaurant we ate in last year
    (epistemic contingency).[45]

I shall not discuss epistemic contingency here, and the notion
of logical contingency is, I think sufficiently clear without

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[45]

R. Taylor, Action and Purpose, p. 42.

a further discussion. However, it is not very obvious what
is meant by the statement that atoms can swerve from their paths.

     According to Taylor we do not mean by this statement
that atoms have the capacity or power to swerve, but only
that atoms might and might not swerve. We mean, according to
Taylor, that the movement of atoms is uncaused. It is true
that we do intend to assert by such a statement that the move-
ment of the atoms is uncaused, i.e., that it is not determined
by some other events; however, Taylor does not seem to be correct
in his claim that we do not ascribe any capacity to the atoms
in the above statement. The ordinary use of language certainly
does not support Taylor's claim. Instead of saying that the
atoms can swerve, we can equally well say that atoms have the
capacity to swerve, or that atoms have the power to swerve.
Furthermore, it seems that the notion of an uncaused event is
comprehensible only as long as we think of the event as not
determined by a preceeding event, but nevertheless as caused,
in some other sense of the word "cause".

     Taylor claims, however, that we can conceive of events
which "just" happen:

> Suppose, for example, that I am paralyzed, so that
> I cannot by hypothesis, move my finger. It is never-
> theless imaginable that despite this circumstance,
> my finger does move from time to time and that its
> motions are uncaused. No doubt this never happens
> but the point is that if it were to happen it would
> not warrant us to say that I can move my finger; it
> just moves, in this case, without my having anything
> to do with it. [45a]

Ordinarily our use of the phrase "it just happened" indicates

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[45a]   R. Taylor, Action and Purpose, p. 53.

our ignorance of the causes of its happening. We say for in-
stance in the case of an accident that it just happened, that
we do not know how it happened but that it just happened, some-
how. But by using the term "somehow" we already indicate
that something made the accident happen. This is however
not implied by Taylor in his use of "it just moves", because
he uses the phrase to indicate that the motion of the finger is
uncaused. He could mean, however that the finger moves all by
itself, i.e., that the finger moves in virtue of its power to
move. In this case we would think of the finger as being like
a person with the power to move, but it is unlikely that Taylor
would like to claim this. Taylor wants to claim that the move-
ment of the finger has no cause whatsoever, and also that his
claim is not self-contradictory. It seems to me, however, that
Taylor is mistaken in his claim that we can imagine that the
movement of a finger has no cause, if the term "cause" is used
so broadly as to cover all our uses of "cause".

Causal Capacity "Can"

Taylor claims that "can" is used to express also the
notion of causal capacity, and that in this use it does not
express any kind of contingency"

> "Can" is, in other words, in this sense, an expression
> of capacity or what does happen - indeed what must
> happen - in case certain conditions are met. It thus
> conveys the idea of causal connection between certain
> states or events.[46]

Instead of the term "can" we may, of course, use also other
terms. We may for instance say that acid can dissolve zinc,

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46   R. Taylor, Action and Purpose, p.45.

or also that it has the capacity to dissolve zinc. In all of these cases we mean, according to Taylor, that if a certain acid comes in contact with zinc, then it <u>will</u> dissolve the piece of zinc, and that it also cannot but dissolve the piece of zinc.

Taylor argues that because the term "can" is used to indicate a causal connection, and because this use does not express the idea of contingency, it is used with completely different meaning in the context of human action, and his arguments against a conditional analysis appeared to support his position. I shall therefore turn now directly to his analysis of the term "can" as it is used with respect to human actions.

"I Can"

The "can" statements with respect to human beings also have different uses according to Taylor, and he lists the following ones:

1. I can operate a typewriter (training or skill).

2. I can run for senate (opportunity).

3. I can do forty pushups (strength or endeavour).

4. I can veto acts of legislation (special position).

But Taylor says that he is primarily interested in considering the statement

5. I can move my finger

because he hopes to

> elucidate the simplest and most basic idea of power of human agency, <u>unencumbered by extraneous notions</u> involved in more interesting and exciting examples.[47]

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[47] R. Taylor, <u>Action and Purpose</u>, p. 41.

Now, I think that the italicized part in the above
quotation suggests that in Taylor's view the meanings of "can"
in his examples 1. to 4. imply the meaning of "can" of 5.,
whereas the converse does not hold. Taylor also suggest that
statement 5. somehow best illustrates "the simplest and most
basic idea of the power of human agency", and he claims that

> "can", in the statement "I can move my finger" does not
> ever mean what it means when applied to inanimate
> things, although it entails what is meant by the word
> as it might be applied to some extraordinary inanimate
> thing, namely, one whose behaviour is uncaused.[48]

Taylor provides us with the following definition of such
a basic "can" statement:

Where S is an agent and x is an act,

"S can x" ≡ 1. x is within S's power

2. S's doing x is causally contingent.

Consequently, according to this definition, it is the case
that I can move my finger, if, and only if, it is within my
power to move my finger and my moving my finger is causally
contingent. As Taylor also claims that my moving my finger
implies that my finger moves, though the fact that my finger
moves does not imply that I move my finger, it follows from
his definition of "S can x" that the fact that my finger moves
is also causally contingent.

Now, it is not at all obvious, that the statement "S

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48   Ibid., p. 55.

can do x" is not equivalent to "It is within S's power to do x", though this is asserted by Taylor's definition. It is difficult to see that anything more is said in the former case than in the latter. There does not seem to be any difference between the claims that I can lift my finger and that it is within my power to lift my finger. Even Taylor himself uses both expressions interchangeably within his fatalistic argument. I think that if we can say that S can lift his finger we can also say that it is within his power to lift his finger, and that if it is within his power to lift his finger then he also can lift his finger. Therefore the necessary condition 1. in Taylor's definition, does not appear to be necessary at all.

Taylor argues with respect to the second condition in his definition that "I can x" is not equivalent to the statement "x is causally contingent",by citing a case in which we apparently can assert the truth of the latter statement and deny it of the former. In Taylor's example a man is keeping his finger above the turning wheel of a roulette. The man knows that in order to avoid death he should move his finger if the wheel should stop with an odd number at his finger, otherwise he should hold it still. It is further assumed that the behaviour of the roulette is causally contingent. Taylor claims that in such a case it is not true that the man can hold his finger still and that he also can move his finger, but that it is true that the man's action is causally contingent. If Taylor's claim is correct, it would follow that the statement "S can x"

is not equivalent to "S's doing x is causally contingent".
Taylor's example, however, does not show that these statements
are not equivalent.

Taylor seems to have assumed in his example that if p
causes q, and if p is causally contingent then q also is causally
contingent. This assumption is not warranted. If it were, we
could claim, given a causal chain where p causes q, q causes
r and r causes s, and where s is an act of mine, that my act
is causally contingent (i.e., uncaused), just because we assume
that p is causally contingent. Thus, if a man drugs me, or
hypnotizes me and then tells me to shout if he produces a green
card, and to sing if he produces a white card, we are entitled
to say, on the above hypothesis, that my singing or shouting are
contingent events, but that it is not the case that I can sing
and that I also can shout. But, while it is true that we would
not be entitled to say that S can sing and that S can shout in
the required sense of "can", it is also false that we are en-
titled to say that S's performance is a causally contingent
event. However, this is assumed by Taylor in his example. He
assumes there that the roulette in combination with a threat
determines the agent's action, and that therefore he cannot
move his finger or he cannot keep it still, but that the action
is nevertheless causally contingent because the roulette coming
to rest is a causally contingent event.

If the above view were correct, then we should also be
able to claim that the ringing of the telphone in Toronto is a
causally contingent event, i.e., that it is uncaused, in virtue

of the assumption that my dialing the Toronto number in Kingston
is a causally contingent event, but this is not acceptable. It
is true that the telephone might ring and that it also might not
ring, but in this case "might and might not" does not indicate
a causal contingency as defined by Taylor, namely, that the
ringing is uncaused for the plain reason that the ringing _is_
caused.

I therefore conclude that Taylor hasnot shown that "I can
x" is not equivalent to "My doing x is causally contingent".
Of course, we cannot infer from this that these statements are
equivalent. It is even not clear whether the latter state-
ment is part of the meaning of the former or whether it is only
presupposed by the former. I therefore also conclude that
Taylor's definition of "I can" is not an adequate representation
of the meaning of the statement in question, and I turn now to
an analysis of the expression "within my power" which, according
to Taylor, is used to express part of the meaning of "I can",
and which also is used by Taylor in the formulation of his
fatalistic thesis.

"Within my Power"

I shall now discuss the question whether the meaning of
the phrase "within my power" can be expressed using modal terms,
and, provided that this is possible, what kind of modal terms
would express the meaning of the above phrase adequately. This
discussion is necessitated by the fact that Taylor seems to think
that the expression in question cannot be defined using modal
terms, whereas some of Taylor's critics have presupposed in

their replies to Taylor's argument that such a transformation
of the phrase is possible.

It seems to me that such a transformation is legitimate,
i.e., that we can substitute an expression containing the modal
term "possible" for the expression "within my power". There is
at least no prima facie reason to suppose that "x is within my
power" is not equivalent to "It is possible for me to do x".
However Taylor seems to think that modal terms are not adequate
for expressing the meaning of the phrase "within my power".

Unfortunately Taylor does not deal with this problem at
great length. Yet, he suggests that the idea of power cannot
be expressed by using modal terms in the following passage:

> Many philosophers are now apparently agreed that the
> idea of causation cannot be described without in one
> way or other introducing modal concepts ...but hardly
> any one has apparently noticed that we need also the
> idea of power or efficacy (my italics).49

Taylor also says within his discussion of Principle 5,
namely, "no agent can perform any given action if there is
lacking, at the same time or any other time, some condition
or state of affairs necessary for the occurrence of the act."

> This is no law of logic, and in fact cannot be expressed
> in the contemporary modal logics, but it is nonetheless
> manifestly true.50

Here he appears to think that the phrase "no agent can perform"

49   R. Taylor, Action and Purpose, p. 19.

50   R. Taylor, Metaphysics, p. 58.

cannot be translated by the use of a modal term. If this interpretation is correct then he would also hold the same view with respect to the expression "within one's power", as in the discussion to which I referred above he uses both expressions interchangeably.

My interpretation of Taylor's position is also supported by the fact that Taylor has nowhere defined the phrase "within my power" with the help of modal terms, and by the fact that according to Taylor the statement "x is within my power" is an unanalysable expression. The following passages show clearly his position with respect to the statement in question:

> The conception of a thing being "within one's power" or "up to him" seems to defy analysis or definition altogether, if taken in a sense which the theory of agency appears to require.[51]

> This is certainly a philosophically baffling expression which I feel sure no one can ever analyze; yet it _is_ something that is well understood.[52]

He does not, however, hold this view with respect to modal terms:

> If we take the idea of impossibility as a generic and undefined one, we can then clearly define the ideas of necessity, possibility and contingency in terms of it.[53]

While there do not seem to be any reasons why the phrase in question should not be translated by the use of the modal term "possible", the ordinary use of language does support the view that such a translation is possible. Thus, if I say that

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51   Ibid., p. 53.

52   R. Taylor, Action and Purpose, p. 55.

53   Ibid., p. 43.

it is within my power to eat with chopsticks, I can equally
well say that it is possible for me to eat with chopsticks,
and I have uttered thereby two equivalent power statements in
the skill sense. Or, if I say that it is within my power to
push the lawn mower (this being a power statement in the strength
sense), I could have equally well said that it is possible for
me to push it. And, if it is within my power to move my finger,
it is also possible for me to move my finger, and if it is
possible for me to move my finger then it is also within my
power to do so. There is no difference in meaning between the
two expressions.

However, though every statement containing the expression
"within my power" can be adequately transformed into a statement
using the phrase "possible for", not every statement using the
phrase "possible for" can be changed into a statement containing
the expression "within my power". For instance, if I say that
it is only logically possible for me to travel like a hover-
craft across the Atlantic on the last day of May, I cannot
also claim that it is within my power to do so. But even if
I qualify my previous claim and say that it is logically within
my power to travel in this unusual way, then my utterance
appears to be very odd, if not non-sensical. This is due to
the fact, that normally an action must be at least empirically
possible before I can claim that it is within my power, and
that the above mode of travelling is not empirically possible,
i.e., the statement about my travelling conflicts with known
laws of nature about the pressure of the stream of air my lungs

supply under optimum conditions.

Indeed, travelling on an air cushion was considered
as such, i.e., as a kind of act, empirically possible even be-
fore the invention of the hovercraft, and in this sense it made
good sense to say that travelling on an air cushion is within
man's power. But, again, we are talking in this instance about
a class of actions, and while we are willing to claim that this
mode of travel was as such possible, or within the power of man,
we are not willing to say that a particular trip of that kind
was possible for, or within the power of a particular agent.
Sometimes this distinction is expressed by saying that some
undertaking is in principle possible, but that it is not act-
ually or practically possible. I shall use the term "pract-
ically possible" as it seems to express best the kind of poss-
ibility in question.

The notion of practical possibility can be explained in
the following way. We can say that an action or event is
practically possible if the agent knows the necessary and suff-
icient conditions for the production of that particular action
or event, and if he has the ability to produce those conditions.
For example, if a man wants to lift a stone, he has to know how
to brace himself, where to put his hands and what motions to
execute. Given that the stone is not unreasonably heavy we
can say that it is practically possible for the man to lift
the stone. If however the stone weighs several hundred kilo-
grams, we have to say that it is empirically, but not pract-
ically possible for the man to lift the stone, unless, of

course, he knows the necessary and sufficient conditions which he has to produce for the lifting of the stone. Thus he has to know how to set up a system of pulleys, or how to use a crowbar, and he has to be able to produce the force to activate the machine. Hence, unless the man knows that all the necessary conditions can be satisfied he is not, nor are we, entitled to claim that that particular action is practically possible.

It would be incorrect to say, however, that a _particular_ act which is practically impossible cannot be said to be empirically possible. Thus we can say that it is empirically possible for A to go to the moon tomorrow at time t, being well aware that this particular action is not practically possible. If we now consider the ordinary use of the phrase "within one's power", it is clear that its meaning is not equivalent to the meaning of the term "empirically possible". We are not willing to claim that it is within A's power to go to the moon tomorrow at time t, unless it is also possible for A to do so, or unless we give a special meaning to the expression "within one's power". As the phrase is used ordinarily with respect to acts it implies that all the necessary conditions which are needed for the occurrence of the act can be satisfied by the agent. However, statements using the "possible for" formulation can be transformed into statements employing the phrase "within one's power" provided that "possible for" is used in those statements as an equivalent to "can".

Therefore it seems that this use of the expression

corresponds to our use of "can" in the contingency sense, but
the meaning of both of these terms can be equally well ex-
pressed by the phrase "possible for". From this it follows
that Taylor is wrong if he intended to claim that the meaning
of the phrase "within one's power" cannot be expressed by the
use of modal terms. However, he may have intended to claim that
the meaning of the phrase cannot be expressed by modal terms as
they are used in statements of the form "It is possible (necessary,
impossible) that p". On such an interpretation Taylor's claim
appears to be correct, as I shall try to show in the following
discussion.[54]

Earlier in this thesis I provided examples, within a
discussion of our uses of modal terms, which showed that the
meaning of "possible for" is not equivalent to the meaning of

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[54]
          The term "possible" is not to be interpreted here
as referring to the probability of p.

          One criterion which we can use to distinguish be-
tween the above two uses of "possible" is to ask whether
the possibility under scrutiny will admit of degrees.
Thus when I say that something is possible meaning that
something is probable, I can also say that something is
more possible than something else. For instance, I can
say that it is more possible than not that I shall go to
Toronto, and I can say this because there are degrees of
probability. However there are no degrees of possibility,
and therefore it does not make sense to say that it is
more possible that the grass is red today unless we mean
by it that it is more probable that the grass is red to-
day.

          It is also clear that the statements "That S is
doing x is possible" and "It is possible that S is
doing x" are logically equivalent statements as the
latter statement has only a reversed word order which
necessitates the use of what the grammarians call the
anticipatory "it".

"possible that". I said that we can think of a case in which it is false that it is possible for me to open a door, because the key to the locked door is not on my side of the door, though it is possible that I shall open the door, because somebody may unlock it. If we now use "within my power" in place of "possible for me" in the above example, we obtain the equivalent claim that it is false that it is within my power to open the door, though it is possible that I shall open it. Thus it is clear that these statements "It is within my power to open the door" and "It is possible that I shall open the door" are neither logically nor materially equivalent. The first statement is not logically equivalent to the second, because the first one asserts that the agent possesses a capacity to perform an act, whereas the second statement claims something with respect to the occurrence of the act. The first statement is not materially equivalent to the second because it attributes the possession of a capacity by the agent to a period of time which does not coincide with the period of time to which we, in the second statement, attribute the possibility of the occurrence of the act.

However if it is true, that it is within my power to open the door at time t, then it is also true that it is possible that I shall open the door at time t, and if it is true that it is possible that I shall open the door at time t, then it is also true that it is within my power to open the door at time t. This means that the statement "It is within my power, at time t, to open the door" is materially equivalent to the state-

ment of the form "It is possible that I shall do x at time t."

From this it also follows that we can test the validity of arguments containing modal statements of the form "It is possible for A to do x at time t" by the use of the rules of modal logic, provided that we replace these statements by the materially equivalent statements of the form "It is possible that A is doing x at time t" before the testing of the arguments. I therefore conclude that the procedure of those critics who, in their arguments against Taylor, have appealed to the rules of modal logic is a legitimate one.

Taylor's Denial of Contingency

It is clear from the foregoing discussion of the expression "within my power", that, by denying that it is within A's power to do x, and that it is also within A's power to do -x, the fatalistic thesis also denies that A's doing x is possible and that A's doing -x is possible. In other words, the fatalistic thesis denies that we can find two-sided possibility or contingency within the context of human actions.

Now it is easy to see that if the fatalistic thesis is true, the term "possible" refers to one-sided possibility only. This is obvious from the fact that if we assert that it is false that doing x is possible and that doing -x is possible, we are saying that either doing x or doing -x is impossible. But if doing x is impossible then doing -x is necessary, and if doing -x is impossible then doing x is necessary. However, if doing x is necessary then it is also possible, though it cannot be contingent, and if doing -x is necessary then it is

also possible but not contingent. In either case we are
using "possible" to refer to one-sided possibility, but we are
also denying that doing x is contingent, by saying that doing
x is possible and necessary. Thus the fatalistic thesis,
which says that it is false that it is within A's power to do
o, and that it is also within A's power to do -o, if true,
forces us to admit that it is always false to say that some-
thing is within A's power, if we use the phrase "within A's
power" in the contingency sense.

Unfortunately Taylor has not made it clear what kind of
contingency is under discussion in his fatalistic argument.
Of course, he is not denying logical contingency with respect
to the acts in question as in the premises of his argument
Taylor says that the two acts under consideration are "alter-
native possible acts". But he also suggests that causal con-
tingency is not under discussion, because he claims that all
considerations of causality are irrelevant for the success of
his argument. (This claim will be discussed later). Therefore
we are left with a kind of undefined contingency, and it seems
that this is the kind of contingency which is at stake in
Taylor's fatalistic argument.

Here I terminate my discussion of Taylor's analysis of
"can" statements, and I turn now to an analysis of Taylor's
views on the relationship between fatalism and determinism.

CHAPTER III

FATALISM AND DETERMINISM

It is Taylor's view that determinism entails fatalism,
and that he can show that fatalism follows from premises which
according to him nobody would be willing to deny. I shall try
to argue that Taylor's argument attempts to establish a kind
of determinism rather than fatalism, and that Taylor is mis-
taken in representing the position for which he is arguing as
being the position of a fatalist. In other words, I shall
argue that Taylor's fatalist is really a determinist. For
this purpose I shall look at the doctrines of determinism
and fatalism and I shall try to point out the marks which set
these two positions apart.

Varieties of Determinism

The problem of determinism is usually thought of as in-
volving questions concerning man's freedom of action, decision
or choice. However, that the term "determinism" within phil-
osophical discusions does not always refer to the same position
is obvious when we look at some of the definitions of "deter-
minism" found in the literature.

Hospers, for instance, claims the following:

Determinism is the doctrine of universal causation:
it says only that every event has a cause (my italics).[55]

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[55] J. Hospers, An Introduction to Philosophical Analysis,
2nd ed., (Englewood Cliffs, N.J.: Prentice Hall, Inc.,)
1967, p. 322.

Arthur Danto, on the other hand, says the following

about determinism:

> It (determinism) says that we cannot do other
> than what we in fact do.[56]

Taylor seems to hold the same position as Danto, though his

claim appears to be stronger as he says that determinism is

the view that all events could never have been otherwise.

Now, it may be possible that Hosper's determinism im-

plies the latter positions, and Taylor, for instance, holds

this point of view. He provides us with "an exact statement

of the metaphysical thesis of determinism" together with two

explicatory statements:

> In the case of everything that exists there are
> antecedent conditions, known or unknown, given
> which that thing could not be other than it is.
>
> Everything, including every cause, is the effect
> of some cause or causes. Everything is not only
> determinate but causally determined.[57]

It is clear from the above quotations that Taylor's

determinism includes the belief that all events are caused

and also the belief that the events which took place at any

time could never have been otherwise. Now, it is quite obvious

that the doctrine of universal causation does not mean what

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[56]   A. Danto, "Freedom and Forbearance", Freedom and
Determinism, ed. K. Lehrer, (New York: Random House,
1966), p. 63.

[57]   R. Taylor, Metaphysics, p. 34.

is meant by saying that we cannot do other than what we in fact do, but it is not at all clear whether the doctrine of universal causation implies the latter statement. For this reason, probably, Hospers claims that determinism contains only the doctrine that every event has a cause. On the other hand, the real interest of a participant in a discussion of these problems seems to lie in finding out whether it is true that we cannot do other than we in fact do.

Therefore, it would seem advisable to distinguish between two kinds of determinism. The first kind of determinism (D1) would then be represented by the doctrine of universal causation, and the second kind of determinism (D2) by the statement that we cannot do other than we in fact do. Such a distinction is supported not only by the fact that it is not clear whether D1 implies D2, but also by the fact that D2 has been inferred from statements other than the doctrine of universal causation.

However, if such a distinction is adopted, it would be better, in order to avoid confusion, to use the term "etiologism" to refer to determinism of the first kind, and to use the term "necessitarianism" to refer to determinism of the second kind. Using this terminology, we could then make some further distinctions. We could distinguish between the kind of necessitarianism which is supported by an appeal to etiologism and the necessitarianism supported on some other grounds.

A man, for instance, may argue that necessitarianism (D2) is true because he believes that some supernatural agencies make him act the way he does, believing at the same time either

that the super agent is acting whimsically, or that he is
acting purposefully according to some plan. Some people have
argued for this sort of puppet theatre determinism, claiming
at the same time that some events are not determined in any
way, and also claiming that the super-agent's actions are not
determined.

We may also encounter a more sophisticated necessitarian
who may claim that he cannot do other than he in fact does on
the grounds that the fact that whatever is true, is always true
implies that he cannot do other than what he in fact does.
Both of these necessitarians thus differ from the man who
claims that he could never have acted otherwise because all
events including acts are caused.

Considered in this light the general problem of deter-
minism is wider than the problem of causal determinism (or
causal necessitarianism). In place of asking whether the law
of universal causation provides us with reasonable grounds for
the claim that we can never do other than we in fact do, we
are asking now whether there are any grounds for the claim
that a man can never do other than he in fact does.

Fatalism

It is only very seldom that the word "fatalism" is
listed as an item of interest in the indexes of the books or
journals of philosophy. And while we find many references to
the problem of free will and determinism, we fail to find
many references to the problem of fatalism. This, and the
additional fact that the discussions on fatalism usually em-

ploy the terms "determined", "free will" and others which are used also in the discussions of free will, may make one suspicious whether there are two problems at all, namely the problem of fatalism <u>and</u> the problem of determinism.

I shall therefore first look at some of the claims which usually are said to be fatalistic claims. The following list consists of some of the fatalistic pronouncements:

1. If the enemy's bullet carries my name, then I cannot do anything to escape it.

2. No matter what I do, I cannot change anything.

3. If I am destined to die on a certain day, then no effort on my part can change this.

4. The order of the world is fixed, we cannot change anything.

5. We cannot do anything about the future.

6. Whatever is going to happen, is going to happen; it is pointless to plan ahead.

7. We cannot prevent events.

Common to all of the above beliefs seems to be the conviction that human actions are not efficacious or effective, i.e., that whatever we do is futile, as it is not in our power to prevent any events, and from this it is inferred that it is pointless to deliberate about future events, and that it is pointless to exert any effort.

The meaning of the term "futile", i.e. the meaning which allows for the substitution of such terms as "ineffective", or "self-defeating" can be analyzed as follows:

"Act x is futile" if, and only if,

1. x is done in order that event y should happen.

2. x does not cause y.

The term "effective", on the other hand, can be analyzed in the following way:

"Act x is effective" if, and only if,

1. x is done in order that event y should happen.

2. x causes y.

The belief that our actions do not have any effects or that we cannot avoid or prevent anything appears to be a necessary part, and the central doctrine of fatalism, but not of determinism. The determinist does not intend to assert that his actions do not have any effects, but only that he could not have acted otherwise then he in fact did.

Nobody of course wants to deny that there are many events which we cannot change because they literally are not within our reach. We certainly cannot do anything to affect the occurrence of the events on most of the other planets, and there are also many events such as earthquakes, tornadoes and our own death, the prevention of which is not within our power. However, the fatalist denies that there are any events which we could have prevented. Of course there are men who are fatalist only with respect to some events. Thus we often hear people claiming that the time of an individual's death is fixed, though we are not able to predict it, and that no effort on the part of the physician will prevent or hasten a person's

death. A similar view is held also by the soldier on the battlefield, who thinks that there may be a bullet with his name on it, and that therefore no action on his part could prevent his death. And these people may or may not hold the view that there are many other events the occurrence of which they can cause or prevent.

One can think of several different reasons why a man would come to believe that fatalism is true. For instance, people believing in the existence of supernatural agents have inferred that the course of the world is determined by such agents and that therefore no act by any man could alter a single event in the general course of events. One could also imagine a slave becoming convinced of such a view just because most of his actions are governed by his master and because his own wishes are constantly thwarted by the master's commands. Again, one can conceive that a man, who for various reasons is constantly unsuccessful in his endeavours, may be tempted to believe that the universe is such that actions are inefficacious. Many people, for instance, will say after an unsuccessful venture that that which happened has perhaps happened as it _ought to have_ happened, or as it was _meant_ to happen.

Sometimes the statements expressing fatalistic views seem to be forwarded with a therapeutic end in mind. Thus, a man will say to his friend: "Do not worry too much, don't get into a state, if it is going to happen that the plane carrying your wife will crash, it is going to happen and you can't do anything about it." And it is not quite clear whether the man

on such an occasion is intending to say that only certain kinds of events are not in our power or that no events are in our power, but the whole situation if interpreted in the latter way seems amusingly incongruous, because in this case the man appears to be attempting to change his friend's state by the dispensing of fatalistic prescriptions.

The fatalistic position has very little plausibility, and it is surprising that anyone should want to hold it. To show how implausible is the fatalist's position, we just have to point out that if I, for instance, want to open the door in order to let the guests into my house, I certainly can arrange it, whereas if I accept the fatalist's position I should just sit in the easy chair and say: "Well, if it is fated that my guests should enter, then it will happen regardless of what I do". The fatalist's own every-day actions refute effectively and decisively his fatalistic pronouncements. Any plausibility which the fatalistic position has when we consider events in the distant future is destroyed when we turn to consider examples of our actions within a narrower time span of the present.

Taylor's Fatalism

It is clear from the foregoing discussion that Taylor is not arguing for a fatalistic position at all, as Taylor does not want to establish that the agent's actions are not efficacious, but only that from two given "alternative, possible" actions he can do only one, in the sense that only one action is in the agent's power, from which it follows that he could not have done otherwise. As a matter of fact, Taylor sets out in his

premises that the agent <u>can</u> cause certain future events. Thus,
the naval commander can set off the battle tomorrow by giving a
certain order today. The question therefore arises whether
Taylor had some definite reasons for saying that his argument
is an argument in favor of fatalism rather than determinism
(or necessitarianism).

I think that there is one possible reason which may per-
suade one to claim that Taylor is arguing for fatalism rather
than determinism. The determinist's position is usually sup-
ported by reference to the principle of causality. It is
usually argued that one cannot do otherwise <u>because</u> every event
is caused. Taylor, however, emphasizes that the success of his
argument does not depend on any considerations of causal con-
nections. Taylor structures his argument by using definitions
of necessary and sufficient conditions (which according to him
do not imply any reference to causality), the law of the ex-
cluded middle, and a principle of disability, (P5) which em-
ploys the notion of necessary condition. But, Taylor himself
never claims that such considerations persuaded him to char-
acterize his thesis as being fatalism.

Before launching into his argument Taylor has given us
some description of a fatalist, apart from a characterization
of the fatalist as being a man who holds the belief which
Taylor is arguing for, namely, it is false that it is now within
my power to do o, and that it is also within my power to do
-o. Taylor says:

A fatalist is best thought of, quite simply,

> as someone who thinks he cannot do any-
> thing about the future.[58]

Taylor proceeds to describe the fatalist as being a man who
also believes that his own behaviour is not within his power,
that it is pointless to deliberate about future events, and
that future events are not avoidable. He then continues:

> A fatalist, then, thinks of the future in the
> manner in which we all think of the past.[59]

If we are to judge Taylor's views on fatalism by what he says
about our beliefs about past events, then his conception of
fatalism does not differ from the analysis of fatalism offered
earlier, as our view with respect to the past is that no matter
what we attempt to do now, our actions have no effects on past
events, i.e. our actions are inefficacious with respect to the
past. Earlier I suggested that many beliefs which we recognize
as being fatalistic beliefs express the conviction that human
actions are not efficacious, and in this sense our attitude
against the past is similar to the fatalist's attitude towards
future events. This being the case Taylor must mean, by saying
that a fatalist is one who thinks that he cannot do anything
about the future, that he cannot do anything about the future
because his actions are not efficacious, i.e. they are futile.

To hold this position is, however, not the same as holding

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[58]   R. Taylor, Metaphysics, p. 55.

[59]   Ibid., p. 55.

the position which Taylor is arguing for in his fatalistic argument. There he claims that an agent cannot do one of two alternative possible acts, but he does not claim that the agent's acts are not effective. On the contrary, he assumes that the agent causes something to happen, namely, the naval battle, by doing something, namely, by giving a certain order. Taylor does not say that if there is a sea battle tomorrow, then it is going to take place no matter what the agent does. Taylor claims instead that if there is a sea battle then the agent is doing something in order that it should take place. This latter claim certainly does not express the meaning of the fatalist's claim that he cannot do anything about the future.

Nevertheless the fatalist's claim that he cannot do anything about the future is open to several interpretations. He may be claiming that he can do x, meaning that he himself causes his own act, but that act x is futile because it cannot prevent the occurrence of an event y, in spite of the fact that x is done in order to prevent y from occurring. But we can also interpret this claim as meaning that the <u>agent</u> does not cause act x and that in this sense the agent is not effective, though the action x itself has some consequences. But, then, the fatalist will probably provide the additional claim that some natural or supernatural causes or agents made x happen, in spite of the impression that he himself causes act x. In this case however there does not seem to be any point in denying that the "action" x may be effective and cause the event y.

Now it seems that the first of the above two inter-

pretations of the fatalist's claim that he cannot do anything

about the future is closer to what a fatalist intends to say

than the second interpretation, but neither of these two inter-

pretations represent Taylor's fatalistic thesis, because

Taylor does not argue that human actions are inefficacious,

nor that they are not caused (in some sense) by the agents.

CHAPTER IV

THE FAILURE OF THE FATALISTIC ARGUMENT

The discussion in this chapter is designed to show
that Taylor has not succeeded in his attempt to establish
his kind of fatalism as a reasonable position. My aim is
to point out the reasons for the failure of the fatalistic
argument and to discuss critically the rebuttals of Taylor's
argument which are found in the philosophical literature. I
shall first consider the uses of the terms "necessary con-
dition" and "sufficient condition", and I shall then discuss
Principle 5 (No agent can perform any given action if there
is lacking, at the same or any other time, some condition or
state of affairs necessary for the occurrence of the act) in-
tending to establish that both Taylor's use of the above terms
and his Principle 5 contribute to the failure of his argument.

"Sufficient Conditions" and "Necessary Conditions"

I shall now survey some of the uses of the terms
"sufficient" and "necessary" within the ordinary language,
in order to be able to compare Taylor's use of these terms
with their ordinary use. I shall also indicate the possible
interpretations of the technical uses of the terms "necessary
condition" and "sufficient condition", and subsequently I
shall consider criticisms which have been made and which
could be raised against Taylor's use of "necessary and
sufficient conditions".

The term "sufficient" is used in the ordinary language

within the context of purposeful human behaviour, and it is
also used to describe other states of affairs or events. Thus
we say that an agent has sufficient means to do this and that.
We say, for instance that A has sufficient light for reading
his book, or that the city has sufficient money to enlarge
its police force. In these and similar cases we can easily
substitute the term "enough" for "sufficient" without changing
the meaning of our claims. We use the term "sufficient" al-
so to indicate that there is enough air in the room for A's
survival, and we say also that there is sufficient water be-
hind the dam to flood all of the valley, if the dam should
break. To deny such claims we use the terms "not sufficient",
"lack of", or "not enough". In all of these cases we are
claiming that a minimum requirement for either an ability, or
the occurrence of an event or action has, or has not been
satisfied.

Another very common use of the term "sufficient" which
is illustrated below can be called "the causal use". We say
for instance, that it is sufficient for A to press the button
in order to obtain his servant's services, or that A only has
to press the button, and his servant will come. In this case
the phrases "it is sufficient for A to do x", "A only has to
do x" and "All A has to do is x" fulfill the same function.
They are used to show which minimum conditions have to be
fulfilled in order that the event which the agent intended to
produce would occur.

The third use of "sufficient" which could be called the "epistemic use" of the term, has to do with matters of evidence. Thus we say, for instance that S has sufficient evidence to support one of his claims. An archeologist, too, will claim that the discovery of old ruins is sufficient evidence for his hypothesis that people have lived in a particular region of the earth. We will also say that the parachutist's jump without his parachute is sufficient evidence that he is going to be killed within a very short period of time.

It is important to note that the causal and the epistemic uses of the term in question are set apart by one very important mark. In its epistemic use the direction of time is irrelevant, insofar that we can say that p is sufficient as evidence for q regardless whether q occurs before or after p, as it can be seen from the above examples. However we cannot use "sufficient" (if we mean by it "causally sufficient") irrespective of the direction of time. Thus we cannot say that p was sufficient (causally) for q, if q preceded p.

The term "necessary" is used to indicate that something is needed for the realization of a possible state of affairs or for the performance of an action. In these cases we employ the phrases "necessary for", "necessary to" or "necessary in order". For instance, we say that a hammer is necessary, or needed, for driving the nail into the wall, or that it is necessary to punish children in order to make decent citizens out of them, or that water is necessary for the survival of a desert tribe. And we call the thing or the action needed "a necessary

condition".

But we also use the term "necessary condition" to in-
dicate that a state of affairs or an event or action is the
result of some other action, event or state of affairs. Thus
we will say that the soldier's death was a necessary con-
sequence or condition of his foolhardiness, or that the bank-
ruptcy of a firm was the necessary condition and consequence
of the mismanagement of the funds by the director of the company.

The terms "sufficient condition" and "necessary condition"
as purely technical terms belonging to the vocabulary of the
philosophers are defined as follows:

"x is a sufficient condition for y" = df. "If x then y"

"y is a necessary condition for x" = df. "If x then y"
There are however, several interpretations of the definiens in
the above definitions:

1.   Truth functional interpretation

On this interpretation the definiens "If x then y" has

the minimal or truth functional interpretation, which

is symbolized by "$x \supset y$" or by "$-(x \cdot -y)$".

2.   Strict implication interpretation

"If x then y" may also be interpreted as "x strictly

implies y" This can formally be expressed as "$x \dashv y$"

or as $N(x \supset y)$ or also as "$-P(x \cdot -y)$.

3.   Empirical or causal interpretation

The causal interpretation of "If x then y" could

be represented by "$x \rightarrow y$" or by "$N_c(x \supset y)$, or also

by "$-P_c(x \cdot -y)$.

Taylor's Use of "Necessary Conditions" and "Sufficient Conditions"

In the fatalistic argument Taylor uses Principles 2, 3
and 4 to define and to explain the terms "sufficient condition"
and "necessary condition". I shall provide here a short analysis
of these premises.

Taylor has given his second principle two formulations,
which I called (P 2a) and (P 2b) in the Introduction of this
thesis.

P2a
> If any change or state of affairs is sufficient for the
> occurrence of some other change or state of affairs at
> the same time or any other time, then the former can-
> not occur without the latter occurring also, even though
> the two are logically unconnected.

P2b
> If one state of affairs ensures another, then the former
> cannot exist without the other occurring too.

According to Taylor (2b) is a clearer way of saying (2a).
The only change which has taken place, apart from (2b) being
much shorter through the omission of some explanatory clauses,
is that "is sufficient for" has been discarded in favor of " en-
sures". Taylor has to say two things about the status of this
principle. First he claims that this is the standard phil-
osophical way of explaining the concept of sufficiency, and,
secondly, he calls the principle a "definition". (He does this
in his discussion of P 4).

Expressing (P2a) as "If P is sufficient for Q, then P
cannot occur without Q", we can write the consequent of this
conditional as "(P and not -Q) cannot occur", or as "(P . -Q)

cannot occur". Interpreting "cannot occur" as "is impossible"
we obtain the expression "(P . -Q) is impossible, which is
equivalent to "(P ⊃ Q)" is necessary". This we can represent
by "N(P ⊃ Q)". On this interpretation, using "suf" for "sufficient",
Taylor's principle can be formalized as follows:

$$P2a_1 \qquad (P \text{ suf } Q) \supset N(P \supset Q)$$

As Taylor claims that his principle is a definition we are, I
think, justified in rewriting his principle as follows:

$$P2a_2 \qquad \text{"P is sufficient for Q" } \underline{means} \ N(P \supset Q), \text{ or}$$
$$(P \text{ suf } Q) \equiv N(P \supset Q)$$

Taylor has by no means explained what sort of relation
holds between P and Q by announcing that "P ensures Q" is a
clearer way of saying "P is sufficient for Q". His example
(The ingestion of cyanaide ensures death) suggests a causal
relation, but surprisingly enough Taylor says that the problem
of fatalism has been formulated without any reference to
causation, and that the relation of sufficiency and that of
necessity has no unalterable direction in time. The latter
is surely the meaning of the qualifying clause, where he says
that P is sufficient for Q at the same or any other time. I
shall return to this point again, after presenting the remaining
Principles relevant to this topic.

Taylor's third principle is a definition of the term
"necessary condition", and again, he has provided us with two
formulations:

P3a

      If any change or state of affairs is <u>necessary</u> for
some other change or state of affairs at the same
time or some other time then the latter cannot occur
without the former occurring too, even though they
are logically unconnected.

P3b

      If one state of affairs is essential for another,
then the latter cannot occur without it.

Expressing P3a as "If Q is necessary for P, then P cannot

occur without Q", we arrive by transformations similar to

those used in formalizing P2a, at the symbolic representation

of this principle:

      P3a$_1$ $(Q \text{ nec } P) \equiv N(P \supset Q)$,

where "nec" is used to stand for "is necessary for".

      The fourth principle is, according to Taylor, a logical

consequence of our second and third principles.

P4

      If some change or state of affairs is sufficient for
(ensures) another, then that other is necessary (essential)
for it; and conversely, if some change or state of affairs
is necessary for another, then that other is sufficient
for (ensures) it.

      Using again "suf" for "is sufficient for" and "nec" for

"is necessary for" we can formalize P4 as follows:

      P4$_1$ $(P \text{ suf } Q) \text{ then } (Q \text{ nec } P)$
                     $(Q \text{ nec } P) \text{ then } (P \text{ suf } Q)$

From this we can infer by the Principle of Equivalence

      P4$_2$ $(P \text{ suf } Q) \equiv (Q \text{ nec } P)$

Taylor also makes the claim that P4 "is simply a logical consequence of our second and third data", i.e. P2a and P3a. Taylor's claim is correct if P2a and P3a are interpreted as being definitions and not as being only statements having the form of a conditional, which _is_ the form used by Taylor. Thus,

$$P2a_1 \quad (P \text{ suf } Q) \equiv N(P \supset Q)$$
$$\underline{P3a^1 \quad (Q \text{ nec } P) \equiv N(P \supset Q)}$$
$$P4_2 \quad (P \text{ suf } Q) \equiv (Q \text{ nec } P)$$

The above argument is correct in virtue of having the following logically valid argument form:

$$W \equiv Z$$
$$\underline{X \equiv Z}$$
$$W \equiv X$$

If, however, P2a and P3a are taken at their face value, as statements having the form of a conditional, then P4 does not follow from them, which can be shown in the following way. On this interpretation P2 and P3 provides us with the following:

$$P2a \quad (P \text{ suf } Q) \supset N(P \supset Q)$$
$$P3a \quad (Q \text{ nec } P) \supset N(P \supset Q)$$

Then, according to Taylor the conjunction of P2a and P3a logically implies,

$$P4 \quad (P \text{ suf } Q) \equiv (Q \text{ nec } P)$$

Considering P2a and P3a as being the premises of the conclusion P4 we have an argument of the following form:

$$P' \supset Q'$$
$$R' \supset Q'$$
$$\overline{\quad\quad\quad}$$
$$P' \equiv R'$$

where

$$P' = (P \text{ suf } Q),$$
$$R' = (Q \text{ nec } P),$$
$$Q' = N(P \supset Q).$$

That this argument is invalid can be easily shown by assigning the following truth values:

$$\overset{f}{P'} \supset \overset{t}{Q'} \quad t$$

$$\overset{t}{R'} \supset \overset{t}{Q'} \quad t$$

$$\overline{\quad\quad\quad\quad\quad\quad}$$

$$\overset{f}{P'} \equiv \overset{t}{R'} \quad f$$

Therefore it is reasonable to accept Taylor's claim that P2a and P3a are definitions in spite of his presentation of the principles as conditional statements.

With respect to Taylor's definitions of the terms in question, I shall now argue that his claim that the definitions represent a standard way of explaining these concepts in philosophy is mistaken, and that Taylor's failure to specify the kind of conditions he is referring to in his discussions leads to the unsupportable claim that by doing something now one ensures the occurrence of some events in the past in the same way as he ensures the occurrence of some future events.

First of all, I shall try to point out that none of the interpretations of the generally accepted definitions of "necessary condition" and "sufficient condition" fit Taylor's requirements which he has set out for the use of these terms.

It is evident from the fact that he has introduced in his definition the modal term "cannot" that Taylor is not using the truth functional interpretation. Thus, in the definiens he has "Impossible (x and -y)" rather than "False (x and -y)". Taylor excludes also the causal interpretation by saying that the problem has been formulated without any reference to causality, and without any regard to temporal order.

It is however not certain that Taylor intends to repudiate the strict implication interpretation, though he seems to do so when he in P 2 stipulates that if A is sufficient for B, A and B are logically unrelated. Now, Taylor probably means that A does not logically imply B when he says that A and B are not logically connected. It is, however, not clear whether Taylor intended to exclude logical implication between A and B, as his qualifying clause reads: "even though the two are logically unconnected". The meaning of "even though" is not made quite clear.

Consequently, according to Taylor, the relation between sufficient and necessary conditions is non-causal, a-temporal, not merely logical but empirical (in some unspecified sense), and it is on these grounds that Raziel Abelson accuses Taylor of conflating logical and causal modalities. In Taylor's hands, according to Abelson, the modal terms behave "like logical modalities in being atemporal and like causal modalities in being non-analytic".[60] Abelson's

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[60] R. Abelson, "Taylor's Fatal Fallacy", The Philosophical Review, LXXII (1963), pp. 93-96.

criticism is sound, and Taylor's claim that he is presenting a philosophically accepted and acceptable view of necessary and sufficient conditions is not warranted.

Taylor's total disregard for the distinctions which we make in our various uses of the terms "is sufficient for", "is necessary for", "is essential for" and "ensures" leads him to assert that the relation between the agent's act in the present and certain events in the past is the same as the relation between an act in the present and certain future events. Thus Taylor says that an order of the naval commander ensures that a subsequent naval battle will occur and that S's reading a headline in the paper ensures that a naval battle took place yesterday, assuming that the meaning of the term "ensures" is the same in both cases. But this assumption is completely unwarranted. The ordinary use of these terms warns us already that the meaning of "ensures" is not the same in the two examples. Thus, we can say that S ensures the occurrence of an event tomorrow by doing something today, but we cannot say that S ensures the occurrence of an event yesterday, by doing something today. We can only say that S's doing something today ensures _that_ an event occurred yesterday. Taylor has been careful enough to formulate his argument in such a manner that this distinction is not immediately noticeable. Thus he says:

1.   If I perform act S, then my doing so will _ensure_
       that there was a naval battle yesterday (i.e.,

that P is true).[61]

2.   If I do act O, then my doing such will <u>ensure</u>
   <u>that</u> there will be a naval battle (i.e., that
   <u>Q is</u> true).[62]

However, while it is possible to say that I shall ensure the
occurrence of a battle tomorrow or that I shall <u>ensure that</u>
the battle will occur tomorrow, we cannot say that I shall
ensure the occurrence of the battle yesterday, but only that
I shall <u>ensure that</u> the battle occurred yesterday. Taylor
is using "to ensure" in the first example in place of "con-
firm", this being the only plausible interpretation of the
use of the term in this example. In the second example the
force of the term in question is such as to imply that S's
doing something <u>will cause</u> (in some sense), the occurrence of
a subsequent event. The term indicates a relation between
events and not the relation between an event and a propos-
ition, as one of his own examples clearly show (The ingestion
of cyanide <u>ensures</u> death). The above distinction is very ob-
vious in the following two statements:

1.   I shall ensure, or make sure, that the fields
   are not wet before ploughing them. (Epistemic
   use of "to ensure")

2.   The hospital is doing everything in their power
   to ensure the killing of all harmful bacteria.
   (Causal use of "to ensure")

Taylor is disregarding this distinction, which is a distinction

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61   R. Taylor, <u>Metaphysics</u>, p. 60.

62   <u>Ibid</u>., p. 61.

between the epistemic and the causal uses of the term "ensures". He is using the terms with these distinct meanings to give his examples some plausibility, without acknowledging the distinction. Furthermore, he also refuses to acknowledge that both of his examples presuppose the notion of causal relations. It is clear, therefore, that it is unreasonable to claim, as Taylor does, that human action is related to past events in the same way as it is related to future events. And it is also clear that the examples which Taylor offers in support of his claim that the situation with respect to the past is the same as it is with respect to the future do not support his claim.

According to Taylor's Argument II the occurrence of a sea fight tomorrow is a necessary condition of my ordering the battle today, and according to Argument I the occurrence of a naval battle yesterday is a necessary condition for my reading a certain headline in the newspaper today. Now, clearly the two situations are not symmetrical. The naval battle tomorrow is a necessary consequence of my act, i.e. my giving of a certain kind of order today. But my reading a certain headline today does not make the naval battle yesterday a consequence of my today's act. Yesterday's naval battle is a necessary condition for my reading of the headline today in the sense that it is a necessary prerequisite, or condition, for my reading the headline today. And it is a necessary prerequisite for my reading of the headline because, according to Taylor's example, it is also

a necessary prerequisite, or condition of my having within my power to read the headline. It is obvious that a necessary condition of my having within my power to do x is also a necessary condition for the exercise of my power to do x. As in Taylor's example the newspaper carries the headline if, and only if the naval battle occurs, and as it does not carry the headline if and only if the naval battle does not take place, it follows that it is not within my power (in the instrumental sense) to read the headline if the naval battle does not take place, because to say the latter is to say also that the headline is not carried by the newspaper, and, thus, that a necessary condition of my having within my power to read the headline is not satisfied.

The meaning of the expression "within my power" is in this case the same as in the case of the swimmer who cannot swim, or who has not within his power to swim because he has no water. Therefore Taylor's claim that his Argument I illustrates a use of the expression "within my power" which is not the use of the expression in the "equipment sense" (I called this use of the expression the "instrumental use") cannot be supported. Therefore, also, Taylor cannot legitimately claim that his Argument I supports his main argument (Argument II) in favour of fatalism with respect to the future.

There is indeed one interpretation of Taylor's argument which may tempt one to claim that the relationship between an act of an agent and some future events is the same as that between the act and some past events. However such a claim

would then rest on the failure to distinguish clearly be-
tween the relationships which hold between statements and
those which hold between states of affairs.

Thus I may claim that the statement o ensures that
the statement f is true, where o is a statement referring
to my doing something today, and where f is a statement re-
ferring to an event taking place tomorrow. In this case we
are claiming that we are entitled to infer from o to f, in
virtue of a relation which holds between the statements.
In this sense of "ensure" I may, of course, also claim that
its being the case that r, where r is a statement referring
to an act of an agent which takes place today, ensures that
it is the case that b, where b is a statement referring to
an event which took place yesterday. In fact, Taylor assumes
in his examples that the naval battle takes place tomorrow
if, and only if the agent gives a specific order today, and
that the agent reads the headline today if, and only if a naval
battle took place yesterday. Given such a state of affairs
we may, of course, claim that the relationships between the
statements are symmetrical. However, it also follows that
we cannot say that the statements f or b are necessary con-
ditions for the action of an agent. Only a state of affairs
or an event can be a condition in the required sense for an-
other state of affairs or another event. Only a state of
affairs or an event, and not the truth or falsity of a state-
ment, determines what is or is not within the power of an
agent.

Taylor's Principle of Disability

The most important part in Taylor's argument is assigned to Principle 5, which I have named the "Principle of Disability". It is the most important of the principles because it tells us something about the relationship between the necessary conditions of an agent's acts and the agent's power to perform these acts:

> P5   No agent can perform any given action if there
> is lacking, at the same or any other time, some
> condition, or state of affairs necessary for
> the occurrence of the act.

Taylor says that the principle does not represent a law of logic, and this seems to suggest that Taylor does not take it to be an analytic statement. However, it is not quite clear whether Taylor hints that this statement is a synthetic necessary truth, when he says, concerning all of the principles, that each of them "recommends itself to the ordinary understanding <u>as soon as it is understood</u>" (my italics).[63] Taylor also claims that the principle cannot be expressed in the contemporary modal logics, but this claim is obscure. He does not say whether he means that the symbolism of the modern logic is not adequate for the formalization of this principle or whether he means that the modal relations involved in this principle have never been considered by modal logicians.

However Taylor provides a short argument in support of this principle by saying that it follows "from the idea of

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[63]   R. Taylor, <u>Metaphysics</u>, p. 57.

anything being necessary or essential for the accomplishment of something else".[64] I think that Taylor intends to say that P5 follows from the fact that something is always necessary or essential for the accomplishment of something else.

Unfortunately, Taylor does not show how the Principle of Disability follows from the latter statement, and it is certainly not obvious how this principle could follow from the statement that something is always necessary for doing something else. It is also not quite obvious what Taylor means by the phrase "essential for the accomplishment of the act". He claims, obviously, that each act has some necessary conditions. But there are some necessary conditions without which I even cannot start the act and others which are necessary for the completion of the act. Thus if I want to lift up a book from the floor and put it up on the table, I must have the strength to lift it up, nobody may interfere with my putting it on the table, there must be a table, and so on. Taylor's use of the term "accomplishment" suggests, however, that he has in mind the completion of the act.

One of the conditions for the completion of the act, is, however, that the agent can do the act. Thus,

Agent A performs x $\supset$ Agent A can perform x

According to P5, then, we should say that no agent can perform the act if he cannot perform the act, which is not very imformative. However, if we say A cannot perform an act be-

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64   Ibid., p. 58.

cause he is not _able_ to, we seem to be much more informative.
What we are saying in this case is that A cannot perform the
act because a necessary condition is lacking, namely, his
having a skill to perform an act which in turn implies that A
had not learned to do the act. Similarly we may say that A
cannot do an act because some instrumental, or other empirical
condition is lacking. But in all such cases we are just ex-
plaining what are the necessary conditions for A's having in
his power to do the act.

It is often said in common speech that A needs this or
that to do the act (i.e. that certain conditions have to be
fulfilled), but I think this is just an elliptical way of
saying that A needs this or that to _be able_ to do the act.
Thus we intend to say that something is a necessary condition
of the agent's having an act within his power by saying that
something is a necessary condition for the act. It is of
course true that if something is a necessary condition of the
agent's having within his power to act, then it is also a
necessary condition of the agent's exercise of this power.
But it is not true that every necessary condition for an
act is also a necessary condition for the agent's having it
within his power to do this act. And it seems to me that
Taylor's mistake lies just here. Let us consider the fol-
lowing.

If A does x, then he also has within his power to do
x, and then it is also true that all the necessary conditions
of his having within his power to do x are satisfied. Thus,

if I am swimming, then it is also within my power to swim.
And if I have it within my power to swim then a great many
of the necessary conditions are satisfied. For instance, I
have the skill, or I know how to swim. I have some water
where I can swim. I am also reasonably healthy, and I am not
terribly afraid of water. If any one of these conditions is
not satisfied I may reasonably claim that it is not within my
power to swim because a necessary condition for my swimming
is not satisfied, and I may claim this in virtue of the fact
that all these conditions are not only necessary conditions
of the occurrence of the act but because they are also nec-
essary conditions of my having the act within my power.

However, Taylor wants to claim that if _any_ one nec-
essary condition of the occurrence of the act is not satis-
fied, then it is not within my power to do the act. In other
words, he wants to claim that every necessary condition of
the occurrence of the act is also a necessary condition of
my having it within my power to do the act, and this is plainly
not the case. For instance, if I am swimming now, then a nec-
essary condition or a necessary consequence of my swimming is
that the surface of the water is disturbed and that the water
moves. If the water however does not move it follows that I
am not swimming, but I cannot say on these grounds that it is
not within my power to swim.

Taylor asserts the Principle of Disability on the un-
proven grounds that _every_ necessary condition of somebody's
doing x is also a necessary condition of his having it within

his power to do x. And though it is true that some necessary
conditions of actions are also necessary conditions for the
agent's having it within his power to do these acts, we may
not generalize and assert this to be true of all necessary con-
ditions of our actions, as the above example indicates. The
lack of a necessary <u>consequence</u> of my exercise of power is
never a sufficient condition for the absence of that power.

Most of the critics attack, of course, Taylor's prin-
ciples of Disability. They do so by offering counter-examples,
by arguing that the use of this principle leads to unaccept-
able consequences and by arguments which are designed to show
that Taylor has committed a modal fallacy. However Taylor's
argument has also been attacked on other grounds. It has been
claimed that Taylor's use of the expression "within one's
power" is an equivocal one, and it has been also claimed that
the form of his argument is not valid. I shall discuss these
criticisms first.

THE VALIDITY OF TAYLOR'S ARGUMENT

Richard Sharvey's criticism is directed at the logical
validity of Taylor's argument.[65] I shall present Sharvey's
paraphrase and his formalization of the argument.

(A)   -1. Q implies that I am unable to do O'
          -2. Q' implies that I am unable to do O
          -3. Either Q or Q'

Therefore,

    4. Either I am unable to do O' or I am unable to do O

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[65]   R. Sharvey, "A Logical Error in Taylor's 'Fatalism'",
<u>Analysis</u>, XXIII (1963), p. 96.

(B)   -1. Q ⊃ -O'
       -2. Q' ⊃ -O
       -3. Q ∧ Q'

       -4. -O ∧ -O'

Sharvey points out that the formalized argument is invalid. We can readily see that (4) does not follow from the premises by assigning the following truth-values to the statement variables:

(C)
            T   T(F) T
    1.   Q ⊃ -O'   Q = T

            F   T(F) T
    2.   Q' ⊃ -O   Q' = F

            T   F   T
    3.   Q ∧ Q'   O = F
    _____   O' = F

          T(F) T(F) F

    4.   -O ∧ -O'

Sharvey, then, correctly says that what follows from the formalized premises is "-O v -O'" as shown below.

(D)   -1. Q ⊃ -O'
       -2. Q' ⊃ -O
       -3. Q ∧ -O'
        4. (Q v -Q') . (-Q v -Q')
        5. Q v -Q'
        6. -O v -O'

Appealing to logical equivalences Sharvey deduces from 6.

        7. -(O.O')

However, Sharvey makes the mistake of symbolizing "unable" by the use of the negation sign, as it is evident by considering (A) and (B) above. Forgetting, apparently, that the sign does not represent "it is not the case" he proceeds to use it as a symbol of the latter phrase. This procedure is obviously

fallacious, because "it is not the case" never expresses the
meaning of "being unable to".

J. T. Saunders in a review of Sharvey's criticism
first points out that there is no reason to suppose that
Taylor intended to construe his conclusion as an exclusive
disjunction in the way Sharvey has done it in (B)4, and then
he proceeds to show that the step from 6 to 7 in argument (D)
is not legitimate.[66] I shall use the modal operator "I" for
"unable", and "P" for "able" in the presentation of Saunders'
argument.

Saunders points out that

$$(IO \lor IO') \equiv I(O.O')$$

is not an equivalence because the entailment holds in one di-
rection only. Thus,

$$(IO \lor IO') \supset I(O.O')$$

Pointing out that 6 has to be read as $(IO \lor IO')$
Saunders then supplies us with the proper logical equival-
ent to 6:

$$(IO \lor IO') \equiv -(PO.PO')$$

The deduction below makes the equivalence more obvious:

-1. $IO \lor IO'$

2. $-(-IO.-IO')$ (De Morgan)

3. $-(PO.PO')$ (From 2, by definition of modal terms)

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[66]   J. T. Saunders, "Fatalism and the Logic of Ability",
       Analysis, XXIII (1962), p. 24.

And the conclusion 3 here is exactly what Taylor wanted to show as following from his premises. Therefore it is quite clear that Sharvey's criticism cannot reach Taylor's argument.

Furthermore, it can be shown that Taylor's argument _is_ valid, and I shall do this by providing a deduction for Taylor's Argument II, showing at the same time what I take to be his argument in its entirety.

In the formalized argument I shall use the following symbols:

$$o = \text{"S is giving the order"}$$
$$-o = \text{"S is not giving the order"}$$
$$f = \text{"The battle is taking place tomorrow"}$$
$$-f = \text{"The battle is not taking place tomorrow"}$$
$$I = \text{"Impossible"}$$
$$P = \text{"Possible"}$$
$$N = \text{"Necessary"}$$

The following is a deduction showing the validity of Taylor's argument:

-1.	$f \vee -f$	
-2.	$(o \text{ suf } f) \equiv N(o \supset f)$	
-3.	$(f \text{ nec } o) \equiv N(o \supset f)$	
4.	$(o \text{ suf } f) \equiv (f \text{ nec } o)$	2,3
-5.	$(N(o \supset f) \ . \ -f) \supset Io$	
-5a.	$(N(-o \supset -f) \ . \ f) \supset I-o$	
-6.	Time is not efficacious	
-7.	$N(o \supset f)$	
-8.	$N(-o \supset -f)$	
-9.	$Po \vee P-o$	
-10.	$-f$	
11.	$(N(o \supset f) \ . \ -f) \supset Io$	5
12.	$(N(o \supset f) \ . \ -f)$	7, 10
13.	Io	
14.	$-f \supset Io$	
-15.	f	
16.	$(N(-o \supset -f) \ . \ f) \supset I-o$	5a
17.	$(N(-o \supset -f) \ . \ f)$	8, 15
18.	$I-o$	
19.	$f \supset I-o$	
20.	$(-f \supset Io) \ . \ (f \supset I-o)$	14, 19
21.	$Io \vee I-o$	1, 20

The above deduction shows that Taylor's argument is valid, provided that the argument is symbolized correctly. Looking at the first premise in the deduction it is clear that it is a correct symbolization of the Law of the Excluded Middle (Taylor's P1), as represented by the claim that a sea fight either will or will not take place. Premises (2) to (4) have been already shown to be adequate representations of Taylor's P2 to P4 in the discussion of his use of the terms "necessary conditions" and "sufficient conditions". Premise (6) is Taylor's P6 and it is not needed in the deduction. Premises (7) and (8) are Taylor's assumptions that the admiral's giving of an order is sufficient for the occurrence of the naval battle tomorrow, and that his giving of another order is sufficient for the non-occurrence of the battle. It is clear that the modal operator is required in the symbolization of these premises because of Taylor's definition of "sufficient condition". Premise (9) is Taylor's assertion that the giving of one order and the giving of another order constitute two alternative possible acts. Premise (10) represents Taylor's assumption that the battle does not take place tomorrow, and premise (15) represent his assumption that the battle will take place tomorrow.

The question arises, however, whether premises 5 and 5a are correct symbolizations of the Principle of Disability, because in the present symbolic form it represents a modally-logically invalid argument. Given that it is necessary that o implies f we may not infer that if it is the case that -f, then it is impossible that o. We may only infer that it is not the case that o. However, given that o necessarily implies f we

may infer that o is impossible provided that f is impossible.

The formalization of what Taylor says in the Principle
of Disability seems nevertheless accurate. The consequent in
"$(N(o \supset f) . -f) \supset Io$" stands for "it is impossible that the
agent does o at time t". It is presupposed here that if the
agent __cannot__ do a particular act, then it is __impossible__ that
he does that act. The antecedent represents the statement that
act o has the necessary condition or consequence f, taking account
of Taylor's definition of "necessary condition", and also the
assertion that f is lacking. I assume also, contrary to
Taylor's assertion, that the rules of modal logic are relevant
to the evaluation of his argument, as I hope to have shown in
my analysis of the expression "within one's power".

However, if Taylor's Principle of Disability represents
such an illegitimate modal argument, then it is clear that
the fatalistic argument is not sound. This, in fact, is the
line of attack which is taken by some of Taylor's critics, as
I shall show later.

Two Charges of Equivocation

Peter Makepeace enters the dispute claiming that the
phrase "it is in my power" can be used with reference to acts
only and that it cannot be used with reference to occurrences
which are not acts.[67] Furthermore, he distinguishes two sep-
arate senses of the phrase, with regard to its legitimate uses.

First he points out that in __one sense__ an act is not in
S's power if the doing of it is logically impossible. Makepeace
says:

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[67]   P. Makepeace, "Fatalism and Ability", __Analysis__, XXIII
    (1962) pp. 27-29.

> It is also vacuously true (a) that whatever is
> logically impossible is something that I cannot
> do. It is also vacuously true (b) that whatever
> I cannot do is something that is not within my
> power.[68]

Makepeace's use of the term "vacuously" is probably intended to

express the obviousness of the above statements. However, for

the sake of clarity it could be pointed out that in the case

of (a) the statement represents a one-way implication. If an

act is logically impossible then the act cannot be done, but

the fact that an act cannot be done does not imply that the

act is logically impossible. However, statement (b) asserts

at least a material equivalence, because S can do x if, and

only if S has x in his power. Makepeace does not say whether

he is asserting that "S can do x", and "S has x in his power"

are logically equivalent, but he is probably asserting just

that, judging by what he has to say in the following passage:

> Now the occurrence being also an action, we can always
> say, instead of "His doing x is impossible", both (a)
> "He cannot do x" and (b) "Doing x is not within his
> power".[69]

The other sense of the phrase is what Makepeace calls

the "meatier sense" of the two. And he claims that this sense

is used with respect to human _abilities_ to do things. He says:

> "Within one's power" only applies to human doings,
> and then precisely in respect of human beings' ab-
> ilities to do things.[70]

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68   _Ibid_., p. 27.

69   _Ibid_., p. 29.

70   _Ibid_., p. 29.

Thus Makepeace is claiming that there are only two legitimate uses of the phrase "within my power", and that Taylor's contention that it is used also in some other sense is not justifiable.

Makepeace constructs two examples to show that Taylor has started his argument using the logical sense of "it is not within my power" and then has switched to the use of the expression in the ability sense. He first claims that it is obvious that the "cannot" is used in the following passage in the logical sense:

(B)   If conditions are such that a snowfall yesterday is a necessary condition for the lawn's being snow-covered this morning, then, given that no such snowfall occurred, we can conclude not only that the lawn is not snow-covered, but that it cannot be.[71]

Makepeace suggests that this use of the term in question is more obvious in this example than in Taylor's because there is no reference to human action, such reference tending to obscure the issues because of the introduction of special conditions. Then he gives another example which has reference to human action:

(A)   If conditions are such that a snowfall yesterday is a necessary condition of my skiing today, then, given that no such snowfall occurred, we can conclude not only that I do not ski, but that I cannot.[72]

Makepeace claims that so far the argument (A) is formally identical with the argument (B), but he suggests that in case

71   P. Makepeace, "Fatalism and Ability", p. 28. I retain Makepeace's lettering of the arguments.

72   Ibid., p. 28.

of the argument (A) we can, though we cannot in the case

of the argument (B), continue in the following way:

(but that I cannot), that it is not within my power.

Makepeace claims that the power expression is still used in

the logical sense. And the argument (A) continues:

> This is consistent with my knowing how to ski, having
> the requisite skill and physique, and so on, and thus
> being able, in that sense. But if it were in my power
> to ski today, then it logically follows that it would
> be within my power to make a snowfall occur yesterday,
> which, we are supposing, did not occur; and this is
> absurd.[73]

Now, Makepeace thinks that because the argument (B) cannot be

continued using power expressions any use of power expressions

other than the logical one must be in the ability sense. Thus

he suggests that the introduction of the power expression in

the argument (A) in its logical sense, such a move being

quite legitimate in the context of actions, enables Taylor to

equivocate, which he is not able to do in the context of occur-

rences other than actions, because whereas the term "possible"

is used legitimately with reference to both acts and other

occurrences, the expression "within my power" applies only

to acts.

Makepeace, in his criticism, presupposes the notions of

agency and acts and he presupposes also that power expressions

are not reducible to expressions which are adequate to describe

and to explain occurrences in the area of inanimate objects.

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[73]   Ibid., p. 28.

If, however, we do not grant him these presuppositions, Makepeace's criticism would not touch the conclusion, that at least one of the occurrences is impossible, provided a necessary condition is lacking for this occurrence.

Makepeace's argument (B) ends by saying that we can conclude not only that the lawn is not snow covered, but that it cannot be. And Makepeace says: "This is perfectly all right so far." What we should conclude, however, is that it cannot be both that the lawn is snow covered and that it also is not snow covered. The former conclusion is all right insofar as it is realized that in ordinary speech we do not always aim for exactness of our expressions. If, however, we allow that the conclusion is all right in a strict sense, then we have to cope with the following argument.

Given that the tap of a water-tank is open today is a sufficient condition for the tank's not being filled with water tomorrow, and given that the tap's being closed today is a sufficient condition for the tank's being brimful of water, then if a necessary condition for the tap's being open is lacking, i.e. given that the tank is full of water, not only is the tap not open but it cannot be open. And if the tank is not filled with water then the tap is not closed today and it also cannot be closed today. But the tank is either filled or not filled with water, therefore either the tap cannot be closed or it cannot be open. And this is the same as saying that it is either impossible that the tap is open

(o) or it is impossible that the tap is closed (c). In symbolic form we have Io ∨ Ic.

Now, given that the expression "in my power" is reducible to "possible" in the sense as it is used with respect to inanimate objects and occurrences, Taylor's fatalistic thesis emerges unscathed. But even granting that the expression "within my power" applies only to human acts, if we can say that it is either impossible that the tap is open today or that it is impossible that the tap is not open today, then I cannot say that it is in my power to open the tap and also in my power not to open the tap today. And we arrive at these conclusions if we accept the principle that given that a necessary condition for an event or act is lacking, then it is not only false that the event or act occurs but also impossible that the event or act occurs.

I conclude, then, that Makepeace is not successful in his attempt to point out the weaknesses in Taylor's argument, and I turn now to another attempt which has been made in order to refute Taylor on the grounds that he has committed the sin of equivocation.

J. T. Saunders directs his attack against the fifth axiom, first substituting for it the following paraphrasis:

> No agent has within his power an act for which a necessary condition is lacking.[74]

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[74] J. T. Saunders, "Professor Taylor on Fatalism", Analysis, XXIII (1962), p. 1.

Saunders maintains that this a$_x$iom is false, and that all we are entitled to say is that,

> If condition x is necessary for the occurrence of y and x is lacking, then no agent performs y.[75]

This amounts to saying that,

> If A's doing P implies Q, and Q is false, then A does not do P.

Saunders accuses Taylor of illegitimately inferring from the latter the following statements:

> If A's doing P implies Q, and Q is false, then A cannot do P.
> If A's doing P implies Q, and Q is false, then A has not the power to do P.

He does not explain very clearly how this mistaken inference has been accomplished, but he suggests that equivocation with respect to "can" has taken place. Saunders thinks that Taylor has used "can" in a logical sense first and then continued to use it in the ability sense. I interpret Saunders as saying that Taylor has made the mistake in passing from (1) to (2) and (3) in the following argument.

$$-1. \quad ((P \supset Q). \quad -Q) \supset P \text{ cannot be}$$
$$2. \quad ((P \supset Q). \quad -Q) \supset P \text{ cannot be done}$$
$$3. \quad ((P \supset Q). \quad -Q) \supset P \text{ is in nobody's power}$$

Saunders interprets the consequent in as "it is impossible for P to follow logically from $(P \supset Q)$. -Q", and he suggests that Taylor has used the "cannot" of 1. in this sense, and the "cannot" of 2. in the ability sense. The expression "within one's power" is also interpreted by Saunders in the ability sense.

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[75]   _Ibid._, p. 1.

Saunders' suggestion, however that Taylor arrived at
the Principle of Disability because he first thought of the
logical impossibility of a certain kind of inference is some-
what implausible, because Taylor himself explicitly says that
the principle is not a law of logic. Furthermore, though it
is conceivable that a mistake of this kind could be made,
Saunders' criticism does not reach Taylor's argument, because
Taylor justifiably claims that "within one's power" is not
used by him in the ability or skill sense. Thus, even if
Taylor had made a mistake of the above kind, he has not made
the particular mistake of passing from the logical sense of
"cannot" to the ability or skill sense of the term.

The second part of Saunders' criticism is built on
the distinction between doing act P and being able to do act
P. He points out that doing act P implies having the ability
to do act P, but that having the ability to do act P does not
imply the doing of act P. According to Saunders, Taylor's
argument should take the following form:

1. doing $p \supset r$
2. doing $q \supset -r$
3. $r \supset -(\text{doing } q)$
4. $-r \supset -(\text{doing } p)$
5. $\underline{r \vee -r}$
6. $-(\text{doing } q) \vee -(\text{doing } p)$

Pointing out that if r is a necessary condition for doing p,
it does not follow that r is also a necessary condition for
having the ability to do p, Saunders criticizes Taylor for
failing to infer 3 and 4 from 1 and 2 respectively, and for
producing 3a and 4a and, consequently, also the fatalistic

conclusions 6a:

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1.   (doing p) ⊃ r
2.   (doing q) ⊃ -r
3a.  r ⊃ (not able to do q)
4a.  -r ⊃ (not able to do p)
5.   r ∨ -r
─────────────────────────────────
6a.  (not able to do p) ∨ (not able to do q)
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Taylor, in the article "Fatalism and Ability", has
himself answered the charge made by Saunders which Taylor
paraphrases as follows:

> It is impossible, as a matter of logic, both that an
> agent should perform a certain act y, and that there
> should be lacking some condition, x, necessary for
> doing y. It does not follow that he is unable to do
> y, but only that he does not do y - which is con-
> sistent with his ability to do y.[76]

Now, Taylor acknowledges there that

> this is true in the usual sense of ability, which
> consists in having the skill, strength, equipment,
> or knowing how.[77]

However he insists that sometimes a necessary condition for
an act y is lacking such that "not only do I not do y, I
cannot do it, no matter what my natural or acquired abilities
might be".

Cahn in his review of Saunders' criticism agrees with
Taylor and illustrates Taylor's use of a power statement of
this kind in the example of a pole-vaulter who cannot, i.e.,
it is not in his power to, pole-vault twelve feet, if he is

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[76] R. Taylor, "Fatalism and Ability", Analysis, XXIII
(1962), pp. 25-27.

[77] Ibid., p. 25.

enclosed in a room which has an eight foot ceiling.[78] How-

ever, Cahn's example does not support Taylor's position. It

seems obvious that in this example the power statement does

not imply the notion of strength. If, for instance,we assume

that the ceiling and the roof have the strength of paper,

then we can say that the pole-vaulter has within his power

to pole-vault twelve feet. But assuming that the ceiling

is a solid steel place we do mean, by saying that the pole-

vaulter has it not in his power to pole-vault twelve feet,

that he has not the strength to penetrate the ceiling.

Cahn's example does not support Taylor's position

because Taylor says that he is using the power expression

in such a sense that a person may have skills, strength and

equipment and know how and yet not have it in his power to do

an act if a necessary condition is lacking. Cahn is however

right in claiming that Saunders' criticism does not reach

Taylor because Taylor does not allow the interpretation which

Saunders has given to Taylor's premises.

The Consequences of the Principle of Disability

Bruce Aune's criticism is directed towards Principle 5.

He has this to say about the principle:

> It is obviously false when the "can" it contains is
> taken to refer to abilities and capacities; and when
> it is taken to refer to physical possibilities, it
> leads to the abolishment of all modal distinctions.[79]

Aune's first step is to show that if we interpret the phrases

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[78] S. Cahn, "Fatalistic Arguments", The Journal of
Philosophy, LXI (1964), pp. 295-305.

[79] B. Aune, "Fatalism and Professor Taylor", The Philosophical
Review, LXXI (1962), p. 519.

"within one's power", "can do" and "able to do" in the ability or capacity sense P5 allows us to construct absurd examples and is therefore false.

Aune points out that S's exerting himself is a necessary condition for S's doing any act. But according to Taylor's P5 if a necessary condition for an act is lacking, S is not able to do the act. Thus, as Aune's examples show,

S's doing push-ups implies S's exerting himself,

given which Taylor would have to admit that

> S's not exerting himself implies S's lacking the
> ability to do push-ups.

P5 on this interpretation would commit Taylor also to the following absurdities:

> S's doing twenty push-ups implies S's doing nineteen
> push-ups. Therefore, S's doing only eighteen push-
> ups and stopping before the nineteenth implies S's
> not being able to do twenty push-ups,

or,

> S's swimming implies S's being in water. Therefore,
> S's not being in the water implies S's not being
> able to swim.

Thus it appears that if the expressions in question are used by Taylor in the sense of having a skill or having a capacity, then P5 is indeed unacceptable, but Aune suggests furthermore that the use of the above expressions in the ability sense is the ordinary one. And he also claims, judging by the given examples, that the expressions are used with this interpretation "by anyone interested in defending the assumption B - 'doing A is within my power'".

First, a comment is in order with respect to Aune's claim about the ordinary use of these expressions. I think Aune is erring if he assumes that the ordinary use allows only the ability or capacity interpretation. And he seems to think this, when he says:

> Clearly, as the expression is ordinarily used - as it is used by anyone interested in defending assumption (B) - "doing A is within my power" does not have these absurd consequences [my italics].[80]

There is a sense of the terms "able", "can" and "within my power" in the ordinary use which does not make it seem absurd to say that S cannot do A or that S is not able to do A because a necessary condition for the act is lacking. For instance, it is quite within the ordinary use of the expression to assert that S cannot drive the nail into the wall because the hammer is missing, or that S was not able to let his friends hear his new composition because he had no piano.

Considering again Aune's examples we see that most of them lose much of their absurdity. Aune's example, in which the swimmer is not able to swim because water is lacking, is only absurd if it is interpreted in the skill sense; it loses all absurdity if it is interpreted in the instrumental sense. Thus it is quite within ordinary use to assert that S is not able to swim in the pool atop of his New York sky-scraper because water is lacking owing to the water shortage.

Aune's examples in which a man is not able to do twenty

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[80]   Ibid., p. 514.

push-ups unless he has done nineteen may seem absurd in one
sense, i.e., in the physical strength sense. However it can
be interpreted as saying that a man cannot do the whole job
if he has not done a part of it. And this is only an affirm-
ation of a logical impossibility. But there is a perfectly
ordinary use by which we can say that S cannot do twenty push-
ups if he is a trainee of a gymnastics teacher unless he has
done nineteen of them. It is not in his power (physical
strength sense) to do twenty push-ups until he has it in his
power to do nineteen.

Aune's first example however seems to indicate a sin
against the accepted usage, especially as he seems to suggest
that exerting oneself in doing something implies the doing of
it. Thus, the statement "S's not exerting himself implies that
S is lacking ability to do push-ups" appears indeed absurd
because it is suggested by the example that the doing of an
act has as its sufficient condition the ability (in some sense)
to do the act, and the accepted use of the term in question
does not seem to sanction this use of power statements.

Cahn argues that the example of the waterless swimmer
supports the view that Taylor's use of "can" is not a dis-
tortion of common usage.[81] However it seems to me that Taylor
denies that such an example illustrates his particular use of
the power statements. To illustrate his examples he excludes

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81   S. Cahn, "Fatalistic Arguments", The Journal of Philosophy,
       LXI (1964), pp. 295-305.

"the usual sense of ability, which consists in having the skill, strength, equipment or knowing how". I have classified Taylor's equipment" sense of ability as the "instrumental sense", and I think that we can think of the swimmer's need for water as the need for equipment to get from one place to another. The example is similar to that of a pedestrian needing a bridge to cross an abyss. On these grounds I think Cahn's conclusions are not acceptable.

Aune's second claim, that the expressions are used in the ability sense by people who are interested in defending the non-fatalistic thesis (B) needs to be treated with caution. First, Aune has omitted from thesis (B) its second conjunct. Thesis (B) actually reads:

A is in my power and -A is in my power.

Secondly, given the paraphrases

I have the ability to give an order and
I have the ability not to give the order,

it is quite plausible to interpret "giving of an order" in the ability sense, but it may not seem plausible <u>at first</u> to interpret the phrase "not giving of an order" in the ability sense. Thus one may be tempted to claim that Aune's assertion that the defenders of thesis (B) are using the expression in the ability sense or capacity sense is not acceptable. But we just have to consider the example of a concert pianist who is required to play the piano with the orchestra for fifty bars and then has to rest for two bars. He certainly has the ab-

bility _not to play_ at that time. Therefore such an objection has no force.

Aune has appended to his first criticisms an argument in support of his claim that P5 leads to absurd conclusions, and the wiping out of all distinctions between the possession of power and the exercise of it.

> It seems clear that doing A will always be a necessary condition of itself; that is, it will always be a necessary condition of one's doing A that one actually does A. But in conjunction with assumption (5) this has the consequence that if A is indeed within my power, in Taylor's sense, then I must actually be performing A - for if I am not, something necessary to my performance of A, namely my performance of A, fails to obtain. Since it is clear that if I actually perform A, A is within my power - at least in the sense of "power" defended by Taylor - it turns out that doing A is within my power if, and only if, I am actually performing A.[82]

I shall show below that Aune's argument is valid.

```
 -1.    A ⊃ A                    (A = S is doing A)          (P1)
 -2.    ((A ⊃ A) . -A) ⊃ (A is not in S's power)  (P5)
┌-3.    -(A is not in S's power)
│ 4.    -((A ⊃ A). -A)          2,3 M.T.
│ 5.    -((   -A ∨ A). -A)      4, Impl.
│ 6.    -(-A ∨ A) ∨ A           5, De M.
│ 7.    -(-(-A ∨ A))            1, Impl., D.N.
└ 8.    A                       6, 7, D.S.
  9.    -(A is not in S's power) ⊃ A
 10.    (A is in S's power) ⊃ A    9, D.N.
-11.    A ⊃ (A is in S's power)
 12.    A ≡ (A is in S's power)  10, 11  Conj., Equiv.
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Aune's claim however, that the conclusion shows that the distinction between the possession of power and the exercise of

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[82]   B. Aune, "Fatalism and Professor Taylor", p. 514.

power has been wiped out, is not justified, as it does not follow from the fact that "A" is true if, and only if "A is not in S's power" is true, that the two statements are equivalent in meaning.

I shall indicate, however, what might have persuaded Aune to make this claim. Aune says:

> But because this last assertion presumably follows from _necessary premises_, either _logical truths_ or _analysis of concepts_ like "necessary condition" and "within one's power" it must be accepted by Taylor as necessarily true. [italics mine][83]

Premise (1) in the above argument is indeed a logical truth, but premise (2) is not a logical truth nor does it follow from an analysis of concepts. Taylor is not maintaining this at all. He says, as a matter of fact, about the premise (2) which is his P5:

> This is no law of logic, and in fact cannot be expressed even in the contemporary modal logic; but it is nonetheless manifestly true.[84]

Aune seems to assume that if "A ⊃ A is in S's power" is a necessary truth it must be an analytic statement. Its being so depends however on the kind of premises used, and though Taylor says that P2 and P3 constitute analyses of concepts he does not say that with regard to P5. The latter quotation seems to indicate just the opposite.

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[83] _Ibid._, p. 514.

[84] R. Taylor, _Metaphysics_, p. 58.

Furthermore if it were a fact that "A ⊃ A is in S's
power" is a necessary truth it would not preclude us from
distinguishing between possessing power and exercise of the
power. It would prevent us only from saying that "S has A
in his power, but he does not do A" is true. But it allows
for the possibility that the statement in question is similar
to the statement "x is colored, if, and only if, x is extended".
We certainly can distinguish between x's being colored and x's
being extended. What makes "A ⊃ A is in S's power" unaccep-
table is the fact that the way we use "within one's power" in
the non-fatalist's thesis (B) we want to be able to say that
A is in S's power but S does not do A.

The claim that Taylor's fatalist abolishes modal dis-
tinctions have been made also by Sharvey and by Saunders.
Thus, in an answer to Taylor, in "Fatalism and Linguistic
Reform" Saunders suggests that Taylor by insisting on his
interpretations of power statements has redefined the term.

> Taylor has, in effect, recommended that we add a
> meaning rule to those which already govern "in
> one's power", viz., the rule: if it is within one's
> power to bring about a situation then that situation
> occurs.[85]

However, Taylor has not recommended an addition to the
meaning of the expression in question. He is saying that he
is using the expression in a sense which does not imply any

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[85]   J. T. Saunders "Fatalism and Linguistic Reform",
Analysis, XXIII (1962), pp. 30-31.

of the other interpretations. Furthermore, the fact that, if it is a fact, "It is in my power to do act A' is true whenever "I am doing act A" is true, does not commit Taylor to holding that both statements _mean_ the same, for the reasons which I gave earlier in the argument against such a claim by Aune.

Sharvey argues for the thesis that in the language of the fatalist all modal distinctions are abolished in the following way:

> After all, a fatalist _is just_ a person who says that we do all and only those things which are within our power. For the fatalist, it is a contradiction to say "He could have done it, but he didn't", so, for the fatalist, "He performs A" _is_ equivalent to "He has the power to perform A." Thus, to say that the fatalist abolishes modal distinctions is simply to say what a fatalist is - he is a person who abolishes modal distinctions.[86]

Sharvey's claim is of course answered already by the arguments above; however it could also be argued that if the fatalist wanted to claim that he by saying "It is within S's power to do x" _means_ "S is doing x", then he would not be able even to state his fatalistic position. His statements about acts would concern only their truth or falsity. A fatalist is thus not commited to saying that he is abolishing modal distinctions.

Returning now to Aune's criticisms I shall discuss his other contention that if we interpret the expressions "can" and "within one's power" as referring to physical possibility,

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[86] R. Sharvey, "Tautology and Fatalism", _The Journal of Philosophy_, LXI (1964), p. 294.

Taylor's argument again leads to the abolition of modal dis-
tinctions.

Aune has not explicated the term "physical possibility",
as he himself readily acknowledges, but he obviously assumes
that we have some facility in the use of this term, and he
gives his reasons for assuming that Taylor might have used
the above modal expressions with this interpretation.

Aune considers two interpretations of "necessary con-
ditions", namely logically necessary and physically necessary
conditions, and he suggests that Taylor might want to exclude
an interpretation of "necessary conditions" in the logical
sense because his interpretation would have "serious conse-
quences" for Taylor's argument. Aune does not say what the
serious consequences are, but I think he is referring to the
conclusion of his previous criticism, namely that on this in-
terpretation Taylor is committed to hold that

S is doing A $\equiv$ S has A in his power.

From the unacceptability of this interpretation Aune
concludes that the modal terms have been used by Taylor in the
empirical sense. Aune also thinks that the term "can" is used
in the same sense both in P3 and P5. He bases his claim on
Taylor's statement that P5 follows simply from "the idea of
anything being necessary or essential for the accomplishment
of something else" (I shall call this the premise of P5).
Aune thinks that Taylor is saying here that P5 actually fol-
lows from P3 and he concludes that the meaning of "can" is

the same in both P3 and P5. The fact that Taylor has given
the same example to illustrate both P3 and the premise of
P5 (A man cannot live without oxygen) certainly supports this
interpretation. However the premise of P5 differs from P3 in
one respect. P3 uses the phrase "A is essential for B", whereas
the premise of P5 uses the phrase "A is essential for the accom-
plishment of Q".

Consider the following expressions:

1. S's driving a nail into the wall implies that
    the nail is in the wall.

2. S's driving a nail into the wall implies that
    S has a hammer-like object.

Now it makes sense to say that S's having a hammer-like object
is a necessary condition for the accomplishment of his act,
namely, the driving of the nail into the wall. But it is in
some sense odd to say that the nail's being in the wall is a
necessary condition for the accomplishment of the act, namely
the driving of the nail into the wall. In the first case we
seem to be referring to the means needed for tne act, whereas
in the second case we are talking about the result of the act.
However, Taylor seems to give a meaning to "necessary conditions"
which is common to both situations.

Aune's actual argument showing the implications of
Taylor's principles, with modal terms interpreted in the em-
pirical sense, has two parts. He first establishes that what
is logically necessary is also empirically necessary [In sym-
bols: $N_1(p \supset q) \supset N_e(p \supset q)$]:

A.

$$-1. \quad P_e p \supset P_1 p$$

$$2. \quad -P_1 p \supset -P_e p \qquad\qquad\qquad \text{1, Trans.}$$

$$3. \quad N_1 -p \supset N_e -p \qquad\qquad\qquad \text{2, Def. of modal terms}$$

$$4. \quad N_1 (p \supset q) \supset N_e (p \supset q) \qquad \text{3, Substitution}$$

The argument A represents a somewhat simplified version of

Aune's argument.

Secondly, Aune shows what follows from Taylor's

Principle 5, provided we accept the above deduction. The

following is Aune's argument:

> Taken in its most general form, assumption (5)
> may be expressed as (5') "(p) (PMp $\supset$ -($\exists$q) ((p $\to$ q).-q)),"
> which is equivalent to the more perspicuous (6')
> "(p) (q) ((p $\to$ q).-q: $\supset$:-PMp $\supset$ p" follows from (6'). To
> prove this, simply instantiate both "p" and "q"
> in (6) to "p." The result of this operation is
> "(p $\to$ p). -p:$\supset$: -PMp." Since "p $\to$ p" is clearly
> true, infer "p $\to$ p, and then by sentential logic,
> conclude with the desired result "PMp $\supset$ p." Since
> the converse of this last formula is obviously
> true, (7') "PMp $\equiv$ p," which holds for all values of
> "p", is also true. Taking advantage of the law that
> if p $\equiv$ q, then -p $\equiv$ -q, (7') may be transformed
> into "-PMp $\equiv$ -p," which in turn yields the law
> "PN-p $\equiv$ -p." The law of double negation then
> permits the reference of "PNp $\equiv$ p."[87]

I shall now present his argument in a more explicit

form in order to show that Aune's argument is valid.

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[87]   B. Aune, "Fatalism and Professor Taylor", p. 517.

B.

-1. $(p)\ [P_e p \supset -(\exists q)\ (N_e(p \supset q)\ .\ -q)]$

2. $(p)\ [P_e p \supset (q) - (N_e(p \supset q)\ .\ -q)]$ 1. Def.

3. $(p)\ (q)\ [P_e p\ -(N_e(p \supset q)\ .\ -q)]$ 2.

4. $(p)\ (q)\ [(N_e(p \supset q)\ .\ -q) \supset -P_e p]$ 3. Trans.

5. $(N_e(p \supset p)\ .\ -p) \supset -P_e p$ 4. U. I.

6. $P_e p \supset [N_e(p \supset p)\ .\ -p]$ 5. Trans.

-7. $N_1(p \supset p)$

8. $N_e(p \supset p)$ 7. A4, M.T.

9. $-P_e p \lor -[N_e(p \supset p)\ .\ -p]$ 6. Impl.

10. $-P_e p \lor (-N_e(p \supset p) \lor p)$ 9. De M.

11. $(-P_e p \lor p) \lor (-N_e(p \supset p))$ 10. Com., Assoc.

12. $-P_e p \lor p$ 8, 11 D. S.

13. $P_e p \supset p$ 12. Impl.

-14. $p \supset P_e p$

15. $P_e p \equiv p$ 13,14. Conj. Equiv.

16. $-P_e p \equiv -p$ 15.

17. $N_e -p \equiv -p$ Def. of modal terms

18. $N_e p \equiv p$ 17.

19. $(P_e p \equiv p)\ .\ (N_e p \equiv p)$ 15, 18. Conj.

From (19) Aune correctly deduces

20. $P \equiv P_e p \equiv N_e p,$

which he set out to show as following from Taylor's presuppositions.

Aune seems to have thus successfully shown that P5 leads to absurd consequences given that Taylor allows that

a state of affairs can be a necessary condition for itself in _his_ sense of "necessary condition". Yet Aune himself suggests that Taylor may want to exclude such cases on the grounds that the necessary conditions he has in mind are those "on which the occurrence of an event physically depend; and that an event does not depend in this sense on itself." But he points out that Taylor may not use this as a counter-argument because Taylor probably could not explain how an act could physically depend on its consequences. Nevertheless, says Aune, Taylor calls the consequences of an act "necessary conditions of the act".

In a reply to Aune, Taylor could conceivably say that in his formulation of the principles there is a clear indication that the necessary condition for A was intended to be a condition distinct and separate from A. For instance Taylor says in P2:

> If any change or state of affairs is sufficient for the occurrence of _some other_ change or state of affairs... (my italics). 88

Taylor could also point out that Aune's claim that Taylor may not use his counter-example is only plausible because Aune has used the unexplained term "physically depend", thus hinting at a causal dependence which Taylor did not want to be included in an interpretation of his argument.

Aune's position seems to be firmly established never-

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88   R. Taylor, _Metaphysics_, p. 57.

theless, but again his claim that the conclusions are absurd
is based on the wrong reasons. He claims that the conclusion
is absurd because in it all modal distinctions are destroyed.
However, as it was shown before, the conclusion of his argu-
ment does not indicate equivalences in meaning. The conclu-
sion is absurd because, as we use the modal terms, we want to
be able to say that an act is in A's power without A's doing
it.

Modal Fallacies

Raziel Abelson attacks Taylor's argument on the grounds
that it contains a modal fallacy.[89] The modal fallacy in
question consists of inferring that a statement is necessarily
true from the fact that it is necessarily implied by one or
more other statements. The fallacy can be illustrated as
follows:

$$e.g., \quad N[((p \supset q).\quad -q) \supset -p]$$
$$\therefore \quad N - p$$

The fallacy is committed easily in a more informal mode of
speech. It is quite easy to forget that the "necessarily"
in "if q implies p, and q, then necessarily p" refers to the
mode of inference, and then to conclude that p is necessary.

Now Abelson claims that the Principle of Disability
is not acceptable because it is the result of a fallacious
inference:

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[89]   R. Abelson, "Taylor's Fatal Fallacy", The Philosophical
Review, LXXII (1963), pp. 93-96.

> "Necessarily if A implies B and B is false then A is
> false" is a truth of logic. Thus the modal term
> "necessarily" applies to the _inference_ from "If A
> the B, and not -B" to "not -A", and does not modify
> "not -A" all by itself. It is therefore wrong to
> claim as Taylor's P5 in effect claims, that if B is
> a necessary condition for A (that is, "If A then B"
> is true), then if B is not the case, A is impossible
> (that is, not -A is necessary).[90]

Since Abelson interprets Taylor's "necessary condition" in

the truth-functional sense, I think that the following de-

duction correctly illustrates Abelson's point.

$$
\begin{array}{ll}
-1. & N[((A \supset B) . -B) \supset -A] \\
-2. & ((A \supset B) . -B) \\
3. & \underline{N-A} \qquad\qquad 1, 2 \text{ Fallacious M.P.} \\
4. & ((A \supset B) . -B) \supset N-A
\end{array}
$$

The first premise represents a logical truth, the sec-

ond premise represents the claim that B is a necessary con-

dition for A, and the third line in the deduction is obtained

by a fallacious inference, leading us to the fourth line which

represents, according to Abelson, the Principle of Disability.

Abelson goes on to suggest that Taylor uses this prin-

ciple to arrive at the first premise (Pr_1) of his argument,

but he does not explain how this inference could have taken

place. However, Aaron Rosenthal, in an unpublished paper,

has taken a similar line of attack and he has also provided

an inference pattern which is a very plausible represent-

ation of the route by which Taylor may have arrived at his

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[90]   _Ibid._, p. 95.

fatalistic thesis.[91]

Rosenthal interprets Taylor's P2 and P3 as asserting that,

"If S_1 is sufficient for S_2, then $N(S_1 \supset S_2)$" (P2)

"If S_2 is necessary for S_1, then $N(S_1 \supset S_2)$" (P3)

He reads "$N(S_1 \supset S_2)$ in P2 as "S necessitates S', and in P3 as "S_2 is necessitated by S_1". And he reads P4 as saying that S_2 is necessitated by S_1 if and only if S_1 necessitates S_2.

Rosenthal interprets Taylor's argument as having the following form:

```
-1.   p ∨ q
-2.   N(p ⊃ r)
-3.   N(q ⊃ -r)
 4.   r ∨ -r
 5.   r ⊃ N -q         somehow from (3)
 6.   -r ⊃ N -p        somehow from (2)
 7.   N-q ∨ N-p        4, 5, 6, C. D.
```

Premise 1 seems to represent here Taylor's assertion that O or -O are alternative possible acts. Premises 2 and 3 represent Taylor's assertion that doing O ensures F and doing -O ensures -F. 4 is Taylor's Pl and 4, 5, 6 and 7 together represent Taylor's Argument II, 7 being equivalent to the conclusion (I O ∨ I -O) in Argument II.

Rosenthal's general attack consists of pointing out that Taylor has committed a modal fallacy in going from 2 to 6 and from 3 to 5, and he suggests that Taylor has used

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91   A. Rosenthal, "Taylor's Fatal Detachment", University of Manitoba, 1966.

P5 as a rule of inference. Rosenthal also claims that the fallacy can be committed in two different ways depending on the interpretation we give to P5. Rosenthal rephrases P5 in the following way:

> It is impossible that an agent perform some action, A, if (1) there exists some state of affairs S, such that S is necessitated by A, and (2) it is not the case that S.

He suggests two interpretations of the above:

1. $(N(A \supset S) \,.\, -S) \supset N -A$
2. $N(N(A \supset S) \,.\, -S) \quad -A$

Rosenthal points out that if Taylor used the first interpretation to obtain 5 and 6 in the above argument then he has committed a modal fallacy by detaching $(N -A)$ from $N(A \supset S)$ as we can detach $(N -A)$ only if we have $(N-S)$ in place of $(-S)$.

Rosenthal also shows that a similar fallacy is committed if one is using P5 with the second interpretation. Thus,

$$
\begin{array}{lll}
\text{— } 2 & N(p \supset r) & \\
\text{—6a} & -r & \\
6b & N((N(p \supset r) \,.\, -r) \supset -p) & (L) \\
6c & N(p \supset r) \,.\, -r & 6a,\ 2 \\
6d & N -p & 6b,\ 6c \qquad \text{(some version of \underline{modus}} \\
6 & -r \supset N-p & \qquad\qquad\quad \underline{ponens}) \\
\end{array}
$$

Here the fallacy is committed by moving from 6b and 6c to 6d.

Rosenthal's first interpretation of P5 seems to me to be a correct representation of Taylor's Principle of Disability,

as it takes into account Taylor's definition of the term
"necessary condition". Thus Rosenthal symbolizes Taylor's
statement that S is a necessary condition for A by using
the formula "A⊃S" with the modal operator "N". Consequently
his interpretation of Taylor's principle differs in this
respect from Abelson's reading of the principle, in which
no modal operator is used in the symbolization of the state-
ment that something is a necessary condition for an action.
Thus on Rosenthal's interpretation we obtain the following
form of the principle:

$$(N(A \supset B) \ . \ -B) \supset N - A$$

However, according to Abelson the principle has the following
form:

$$((A \supset B) \ . \ -B) \supset N - A$$

The latter formulation of the principle is not correct be-
cause Taylor is not using "y is a necessary condition for
x" in the truth-functional sense, as I pointed out in a pre-
vious discussion of Taylor's use of the terms in question.

Rosenthal's second interpretation of P5, however, in
which P5 becomes a law of logic, namely a variation on modus
tollens, is not as plausible as the first, because Taylor
himself says that P5 is not a law of logic and because the
consequent of P5 asserts that the agent cannot perform an
action, or that the action is impossible, whereas on the sec-
ond interpretation the consequent represents the statement
that the agent does not perform the act. This however does

not affect the validity of Rosenthal's criticism that Taylor's
Principle of Disability, on his first interpretation, repre-
sents a fallacious inference pattern, and that for this reason
Taylor's fatalistic argument has no force.

Conclusion

The above criticisms of Taylor's Principle of Disability
clearly show that the principle is false. It has been shown
to be false by the use of counter-examples, by arguments indi-
cating that the use of such a principle leads to absurd con-
clusions, and by arguments establishing that the principle
represents a fallacious inference pattern. It follows from
this that all three arguments by Taylor (the main argument,
Argument II, and the two supporting arguments, Argument I and
Argument III) in favour of his fatalistic thesis are not
acceptable since all of them require the use of the Principle
of Disability. I conclude, therefore, that Taylor has failed
to establish his fatalistic thesis.

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