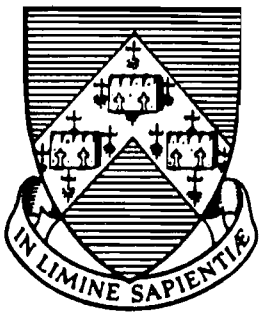

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Need, Equality and Social Justice

by A. J. Culyer and Adam Wagstaff

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NEED, EQUALITY AND SOCIAL JUSTICE

by

A.J. Culyer and Adam Wagstaff

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Abstract

It is frequently claimed that social justice requires that some goods - medical care is a frequently cited example - be distributed according to "need". The most common justification for adoption of this principle is the cause of equality: the principles of "distribution according to need" and "equality" are seen as inter-related. In this paper we propose a definition of need and explore the distributional implications of allocating resources according to need. We dispute the claim that the principles of equality and "distribution according to need" are in any way linked and argue that the latter is unlikely in general to result in the attainment of equality and may actually *increase* inequality.

1. Introduction

We intend in this paper to explore the relationship between "need", as a distributive principle, and equality. They have often been suggested to stand (to use the words of Miller 1976) "in a peculiarly intimate relationship to one another" (p148). In particular, we wish to ask whether the adoption of the principle of "distribution according to need" results in the attainment of equality (or greater equality than would otherwise obtain) in the particulars to which the need itself relates. We shall argue that there is no automatic connection between the two principles and, indeed, that it is quite easy to envisage common circumstances under which the adoption of the need principle increases inequality.

Medical care is the most commonly cited example of a commodity that ought to be distributed according to need (B Williams 1962, Gillon 1986, Braybrooke 1987) and, although it is not the only such commodity, it is the focus of this paper. We have chosen this particular commodity partly because the question of how medical care resources ought to be allocated has recently emerged as a major policy question in most developed countries, and partly because in our own country (the UK) health authorities have recently been charged explicitly for the first time with assessing and making arrangements for the meeting of their populations' health care needs. It is therefore particularly timely for the theory of need to be more carefully and specifically addressed than hitherto and, moreover, in such a fashion (which we hope to provide) as to yield some ethical principles capable of practical application by those with authority.

2. What is "need"?

With the notable exception of Braybrooke (1987), who studiously and self-consciously avoids offering any definition of "need", most of the literature we have come across that has addressed the question of meaning has sought to provide a comprehensive concept that embraces the common meanings that seem to be attached to the meaning of the word, so that a common test of reasonableness of a meaning has been to construct a grammatical sentence containing either the noun or the verb "need" and then reflect on the consistency of the proffered definition with what is intuited about the sense of the sentence. We are sceptical whether there is any definition of need that would be consistent with all of the various sentences which it is possible to construct (and that doubtless have been constructed) using "need". Indeed, such an endeavour seems to deny the very possibility that a useful definition might actually be inconsistent with some such sentences. But the sciences, and especially perhaps the social sciences, are full of examples of everyday words (like "efficiency" or "cost") whose meanings are tighter than the everyday usage, whose applicability is narrower, but whose usefulness is thereby enhanced. We think it is time that "need" joined the ranks of specialized words having a dual existence in common speech and, in setting out our own

definition and our reasons for it, we feel no special imperative to force our definition to fit all possible sentences containing "need". What we want to do is to offer a definition that is as precise a version as we can make it of the usage we detect is made (or ought to be made!) of the word in the context of resource allocation and, in particular, of health care resource allocation. It will not take much imagination to think up examples where our usage will not fit and in such cases we would feel inclined to use another word, or "need" (in quotation marks), or to use some other identifier to show that the idea represented by the word is a different one from ours.

Like most who have written on the subject, we view "need" as an inherently instrumental concept: an entity may be said to be needed only if it is a necessary condition for the accomplishment of something else (cf eg Barry 1965 pp47-48, Culyer 1976 p14, Flew 1977 pp214-218, White 1975, A Williams 1974). On this view, any normative content in need - for example, any implication that needs ought in part or in whole to be met - derives from the moral character of the ends for which the entities needed are instrumental. Thomson (1987) has argued vigorously against this view, apparently on the ground that normative usage of "need" entails what he calls an "element of practical necessity", namely that, so used, the word implies an inability to do without the entity said to be needed, or that the consequence of doing without it would be seriously bad for someone. We much prefer to address the issue of consequences separately, as they raise a number of important issues (especially for practical decision makers) which Thomson's approach relegates into a rather mysterious background. The attempt by Wiggins and Dermen (1987 p64) to develop a non-instrumental - or categorical - concept of need by allowing the end-state for which the entity asserted to be needed to be both fixed and elliptical seems to us to fail. The main reason for this arises later on the same page of their article in which they allow that even a categorical need can have degrees of urgency and "basicness", and that failing to meet such a need can have consequences that are of varying degrees of badness or gravity. Our conjecture is that each of these possible ways of assessing the ethical force of any claim of need is in effect an appeal to the nature of the end served by the resources held to be needed. It may be that a consensus might be reached on the question of whether a particular need was so urgent (etc.) as to command a priority over all other claims on resources. But that is an empirical question (viz. whether such a consensus exists) and whether any such categorical need exists will doubtless be determined by reflective individuals assessing the character of the end-state for which the resources are instrumental.

Our focus will be on the need for resources and the nature of the need statements we wish to make might therefore be seen as taking roughly the following form: health care resources are needed because they enhance health, prevent its deterioration, or postpone death. One might also say (although this will not concern us much here) that health itself is needed. In this case one would again be asserting its instrumentality for the accomplishment of some even more ultimate purpose, such as the enjoyment of a flourishing life. It is clearly possible to imagine some regression of means-ends relationships. But the regression is not infinite. It stops when one reaches an ultimate

end. This is not a need (in our sense) though those elements (resources, personal characteristics, and so on) that are necessary for its attainment are needed. Braybrooke (1987) seems to have something similar in mind when he writes "Questions about whether needs are genuine, or well-founded, come to the end of the line when the needs have been connected with life or health" (p31), though we doubt whether "health" is the end of a line and are sceptical about "life" - or at least certain kinds of life (such as life spent in a persistent vegetative state) - being the end of the line. Wiggins and Dermen (1987) seem to slip up when they write that "freedom, choice, and autonomy can be argued to be vital human needs, and this will make them candidates for any protection that is accorded [them]" (p66). On our view, it is better to see these as ends of the line that are ethical in their own right. It is the protection that is (or might be) needed, not the states at the end of the line.

Viewing need in instrumental terms inevitably focuses attention on the character of the goal for which the entity - in our case medical care - is held to be needed, and on the relationship between the goal and the entity in question. Implicit in much of the philosophical discussion of need is the assumption that the relevant goal is simply the transition from the individual's current state (eg "ill" or "close to death") to some clearly defined unique end-state (eg "healthy" or "flourishing"). This rests in turn on an implicit assumption that the variable used to define the goal is a binary variable: health, for example, is defined in terms of being sick or being healthy. This gives rise to an on-off interpretation of the entity which is held to be needed and to a notion of need that is also binary. Culyer's (1976 pp15-16) individual dying of thirst in the desert, for example, can either receive or be denied a glass of water, and hence either needs the glass of water or he does not.

We argue below that this binary interpretation of need is unduly limiting. It does, however, illustrate several important points about the instrumental notion of need. First, a necessary condition for a need for an entity to exist is that the entity in question should have a positive productivity in terms of moving an individual from his current state to the desired end-state. In the context of medical care it is worth noting what a radical requirement this is. There is considerable evidence that much medical care has a small, negligible and sometimes even negative impact on health. The last two types of care cannot be said to be needed. A major practical task facing any health care system charged with the responsibility of meeting needs therefore immediately becomes the appraisal of old and new health care technologies to see whether they pass the test of positive productivity. The judgement is usually a probabilistic rather than a deterministic one. In addition, many of the services commonly bundled into the generality of "health care" are in the nature of complementary services, such as the hotel services of hospitals, for which the need may not have the same or as strong a basis in terms of instrumentality for health. It may (or may not) be necessary for a person to be admitted as an inpatient, but whether, as an inpatient, 2-star or 5-star services are needed for the medical care to have an effective impact on "health", or are needed for ends that are comparably compelling, is an issue that requires the attention of practical policy-makers.

Second, although a positive productivity is a necessary condition for a need to exist, it is not sufficient, for there may be (and usually is) a variety of alternative appropriate courses of clinical action, embodying different amounts and types of resources, each of which has a positive productivity. Each cannot be said to be needed (indeed they will often be mutually exclusive options). An appropriate criterion for selecting between such options is, we propose, the test of cost-effectiveness. Where several measures have a positive productivity, that which is needed is that which is most cost-effective at effecting the transition to whatever target end-state has been selected.

Third - which seems to be a rather counter-intuitive implication of our concept of need - being sick is not a necessary condition for being in a state of need for health care. A person may be healthy but in need of (preventive) care to avert future ill-health or a person may be sick but incapable of improvement via the application of (further) medical care. Being sick is neither a necessary condition nor a sufficient condition for needing health care, a point that has often been overlooked by those who identify need with ill-health (cf eg B Williams 1962, Le Grand 1978).

The restrictiveness of the binary interpretation of need is obvious. It rules out, for example, comparisons of the degree of need (an individual either needs medical care or he does not), so that one cannot make statements like "A needs more medical care than B". A corollary of this is that all needs should be met. If it is accepted that the ethically proper goal is the attainment of state Y, and X is the only means by which this state can be reached, then X is genuinely needed. This results in paradoxical statements of the type that Culyer's individual dying of thirst in the desert may not need a glass of water if it is not agreed that he should have it. It is true that it is paradoxical only because someone has made the rather tough decision that the water will not cause sufficient "flourishing" for the thirsty person, or that he does not deserve it, or that some other thirsty person will benefit more, or they need it rather than the first candidate. But it nonetheless jarrs with everyday usage of the word "need", which allows for statements of the type "A is in greater need than B". This too is associated with a paradox, namely that in the context of resource scarcity, in which not all the decent things that one may wish to do for people can be done for them, it will be judged ethically proper for some needs to go unmet (but it is only a paradox because need is defined in such a way that it exceeds the capability of that existing resources have to meet it all).

The binary interpretation of need is also at odds with the bulk of the literature on the measurement of health, in which health is viewed as a continuous (rather than a binary) variable, and implies a degree of lumpiness in medical care that does not in practice exist. In the context of resource allocation decisions it makes more sense, in other words, to talk about health improving or worsening rather than about a person being sick or healthy, and to talk about applying a little more medical care or a little less, rather than about applying it or not applying it. Indeed, there is some ambiguity in the health measurement literature attaching to the meaning of "none" and "complete", which accounts we conjecture for the popularity of interval rather than ratio scales in the empirical

measures of health, which characteristically resemble measures of temperature. The characteristic approach in the relevant literature has been to develop "profiles" and indices based upon multidemensional measures of characteristics of individuals (ability to perform particular activities, freedom from pain, and so on). It is plain that the development of lists such as these and the weighting of the various components in the list are value-laden exercises which raise further important questions about the competence of the various types of person to make these judgements on behalf of others and the form of accountability that may be suitable to check that they are being made in appropriate ways.

Viewing health and health care as continuous rather than binary variables has two implications. First, the continuity of health care means that it is not merely the (total) productivity of resources that has to be tested but their marginal productivity. The huge variations in resources used to treat apparently identical cases (cf eg McPherson 1990) suggests that most health care systems ought to embody better incentives (or penalties) for medical decision-makers so that they more carefully reflect on the difference between saying (perhaps correctly) that a patient needs "care" and saying that the particular care needed is whatever it is (using gold standard practice guidelines and showing awareness of the point at which - say - further days in hospital have no positive productivity in terms of health). We do not wish to imply, however, that health services ought always and only to be in the business of meeting needs. It may be that some of the variation to be observed in practice style reflects responses to demand and it may also be that some systems pay too little attention to consumers' preferences and demand (as has often been said of the UK's NHS).

Second, if health itself is a continuous variable, and moreover one that lacks a zero and an upper bound, it seems impossible to define an unambiguous state of health that can be taken as the end served by the necessary means. But if this is so, then what is needed is also ambiguous, since associated with each possible end-state will be a different level of need (the amount of medical care resources required to effect a transition from the current health state to the state in question). By analogy with the economist's concept of a demand function, the relationship between the amount of the entity needed and the desired end state might be thought of as a *need function*.

One way forward would be for someone (it goes without saying that the person will require some appropriate form of legitimacy) to set a target level of the end state. Weale (1978 p68) appears to have this approach in mind when he writes "if we say that A has greater needs than B, we simply mean that A needs a larger set of primary goods than does B *in order to achieve the same level of welfare*" (emphasis added). Braybrooke's (1987) treatment of need, in which needs are regarded as whatever it is agreed should have priority in the distribution of resources, is clearly similar. It is clear that once the target has been set, the need ought to be met. Though Weale seeks to do so, one cannot, therefore, talk of unmet need in this approach. We would not wish to rule out on *a priori* grounds such usage, as it seems quite possible that there may be contexts in which it is sensible to

construct sentences of the sort "the Authority has decided that the needs of the community are X". But the approach is open to abuse by those who seek to impose their own value judgements on others; it is far from clear, for example, why one should want to set the same target health state for everyone irrespective of both their initial state of health and the technological opportunities for improving their health. Moreover, like the binary interpretation of need, the target approach can lead to paradoxical uses of the word "need", as in the claim that a person dying of thirst may not need a glass of water (Culyer 1976) and in the claim that the disabled may not need wheelchair ramps (Barry 1991 plxviii). In a tilt at Braybrooke, Barry describes this usage of the word "need" as "pathological".

We therefore adopt in this paper an alternative approach, which admits of the possibility of unmet need and makes clear the links between resources and the variety of desirable and ethical end-states which they may serve. Instead of defining the need for medical care relative to some pre-specified end-state, we define it simply in terms of improving (or maintaining) health. A need for medical care is then said to exist so long as the marginal product of care is positive, ie. so long as the individual's capacity to benefit from medical care is positive (Williams 1974, Culyer 1976). We define an individual's level of need as the amount of medical care required to reduce the marginal product of care (or equivalently the individual's capacity to benefit) to zero. Clearly, "need" so defined is not synonymous with capacity to benefit, as it is in, for example, Culyer (1976) and Williams (1974), but rather is a function of capacity to benefit, depending too on the productivity of medical care at the margin. The diagrammatic analysis below clarifies the difference between the present and previous approaches.

By way of a final prefatory remark, we do not think that the concept of need which we have proposed necessarily implies lexiographic priority over all other conceivable claims on resources. Our view of need can usefully be seen (though this is not necessary) as a development of the economic concept of a merit good (Musgrave 1959), a good whose consumption is considered so meritorious that its availability is offered on subsidized terms (sometimes free of user-charge) and sometimes made compulsory. It is thus "special" and what makes it special is the character of the benefits it yields. Since these are often to be seen in terms of the ways in which the characteristics (such as the health or cognitive ability) of individuals are changed, and the priority to be attached to such goods (and the needs which they imply) is to be assessed by means of the relative social value attached to the ultimate outcomes relative to other components of social welfare. Sen (1979) terms the conventional Paretian approach of economists to making judgements about change in social welfare "welfarist"and it is appropriate to find some other term to describe sources of social welfare that are not individual utilities derived from the consumption of commodities but which are, instead, characteristics of individuals. One of us (Culyer 1989) has previously suggested the term "extra welfarist" for an approach that assesses the desirability of social states that embodies such judgements in addition to the individual welfares conventionally considered. In the extra welfarist

scheme of things, what distinguishes merit goods (or, as we shall now say, needs) from other goods is that their value is assessed at least in part independently of the utility they yield to the individuals who consume them. We leave open the question as to how the relative weights of met needs and other individual utilities are to be established in the social welfare function. Given, however, that a characteristic of individuals, such as their health, is a continuous variable, we conjecture that it is highly likely that the social weight attached to the varying levels of health is also a continuous variable. Whatever priority is, therefore, to be attached to needs vis-a-vis mere wants, we see no reason to suppose that it is lexiographic. To be sure, the use of "need" is to attribute some force to claims made on resources by invoking it, but we deny that it is necessary to accord a "full *prima facie* force" (Wiggins and Dermen 1987 p62) to "need", since it has no *prima facie* force - its ethical force derives from the force (which is not a fixedly compelling one) of the ends for which the resources are needed. Moreover, the assertion of need as having lexical priority can easily slip into what can only be described as fanaticism. For example, Harris (1987) asserts that "life-saving has priority over life-enhancement and ... we should first allocate resources to those areas where they are immediately needed to save life and only when this is done should the remainder be allocated to alleviating non-fatal conditions" (p120). This point is made without qualification so, for a given cost, the shortest extension to the most miserable of lives is to receive priority over the most massive improvement in the quality of life expected to be very long. This strikes us as absurd as well as cruel. Nor, of course, is it an ethical imperative followed anywhere in any health care system known to us.

It is to be expected that any attempt to give a term such as "need" a special and precise meaning will rule out some common and casual meanings given it. Moreover, it would be disappointing were the attempt not also to come up with some counter-intuitive implications that yielded important insights into how some of the great questions of social policy might be approached. However, we believe that the definition we have offered is consistent with the list of desiderata proffered by Wiggins and Dermen (1987 p63): it "stirs our sense of importance" and is likely to "excite controversy" (indeed it helps us to give the latter a precise agenda for picking apart many contentious issues of value in social policy); it offers an explanation of what may be significantly meant by "In spite of the development of *in vitro* methods of test and experiment and advances in tissue culture techniques, we still need to perform experiments on live animals" and "The outstanding object [of the Beveridge Plan] is to provide as far as possible a unified system of income maintenance to cover needs arising from a variety of causes" and "From each according to his ability, to each according to his need".

3. Distribution according to need and equality of outcome

It is helpful (indeed it is difficult to see how one would proceed otherwise) to couple the principle of "distribution according to need" with the distinction between horizontal equity (in this

case the requirement that persons in equal need be treated equally) and vertical equity (the requirement that persons in unequal degrees of need be treated in an appropriately dissimilar way). In what follows we adopt Aristotle's version of the vertical equity principle and require that unequals be treated unequally in proportion to the relevant inequality.

The axes of quadrant I in fig 1 represent the health of two individuals, A and B. We assume that health can be measured on a ratio scale but do not require the scale to have an upper bound. One measure that meets these requirements is the quality-adjusted life year (QALY) used by A Williams (1985), which takes into account both quality and length of life. We sidestep the difficulties surrounding the definition of equality of health where the latter has a time dimension as well as quality dimension by assuming that A and B are the same age. In fig 1 both A and B have the same prospective health, the initial - or 'endowment' - point being S.

One factor affecting how far the quality and length of life of the two individuals could be increased (ie. their capacity to benefit) is medical technology. The latter is represented by the health production (or "output") functions in quadrants II and IV: these show the maximum QALYs attainable at each level of expenditure on medical care (M). In the case illustrated the marginal product of medical care (the slope of the production function) reaches zero for both individuals at the same level of health. Both individuals therefore have the same capacity to benefit (given by the difference between the QALYs associated with the point where the marginal product of medical care is zero and the QALYs associated with point S). On our earlier definition, a need for medical care exists in fig 1 so long as we are in the interior of the box to the north-east of point S. In the case illustrated, both individuals have not only the same capacity to benefit, but also the same need for medical care: the amount of medical care required to eliminate any capacity to benefit is the same. The amount of need for each person is M^*_A ($=M^*_B$) and the need for the two-person community is given by point N in quadrant III.

In a world of resource scarcity, not all the need for medical care can be met. In the case illustrated the budget for medical care (depicted by the budget constraint in quadrant III) is such that even if all the budget were devoted to one person, that person's post-treatment QALYs would be less than their feasible maximum. By tracing all points on the budget line through quadrants II and IV round to quadrant I, a health frontier can be constructed showing the various combinations of post-treatment health that are feasible, given the budget and the current state of medical technology. In the case illustrated this frontier is symmetrical about the 45^0 line in quadrant I (the line of equal health), since both individuals start off with the same health and face identical health production functions.

In the case illustrated the implications of adoption of the "distribution according to need" principle are clear. A and B are in equal need and therefore medical care expenditures are to be divided equally between them. The result is that both enjoy the same improvement in health, the

final distribution being shown by point e in quadrant I. In this case, therefore, "distribution according to need" is, indeed, egalitarian, in the sense that it results in equality of outcome (ie. health).

4. More general cases

The case illustrated in fig 1 is somewhat uninteresting. Not everyone will enter the health care system in the same state of health. Nor will everyone be able to be brought up to the same level of health by their treatment. Individuals will typically have different capacities to benefit and different needs for medical care.

Fig 2 illustrates the case where A and B start off in the same health but have different capacities to benefit from medical care. Both, however, have same need for medical care, M^*_A ($=M^*_B$). This example illustrates the difference between our definition of need and the identification of need with capacity to benefit (Culyer 1976, A Williams 1974). Since A and B are in equal need in fig 2, the horizontal version of the principle of "distribution according to need" dictates that they should receive the same amount of medical care (point N'). This gives rise to the distribution of health at point n', which is clearly in B's favour. In other words "distribution according to need" in this case results in both individuals receiving the same amount of resources, but the person with the greater capacity to benefit receives the larger health improvement. It is apparent, then, that adoption of the principle of "distribution according to need" would, in this type of situation, generate inequalities in health where none existed before.

Fig 3 illustrates another case. Here individual B starts off in better health than A. Though medical technology can bring both individuals up to the same level of health, less medical care expenditure is required to effect this improvement in the case of B than in the case of A. B's need for medical care is therefore smaller than A's (M^*_B compared to M^*_A). It is worth emphasizing that this is not necessarily the case: B's condition may well be such that he requires more medical care than A to be brought up to the same level of health, even though his initial health is better. The degree of inequality in need can be measured by the angle α in quadrant III. According to Aristotle's version of the vertical equity principle, medical care expenditures ought to be divided between A and B in proportion to this inequality. This gives point N' on the budget constraint in quadrant III. Tracing round to quadrant I gives the post-treatment health distribution shown by point n.

Two points are worth noting. First, although in the case illustrated the "distribution according to need" principle results in there being less inequality in health after treatment than there was before, there is no reason why this should in general be the case. A sufficient - but not necessary - condition for point n' to lie beneath the 45^0 line through S is that the person with the greater need also has the greater capacity to benefit, as is the case in fig 3. To see why keep A's

level of need the same but reduce his capacity to benefit. This moves his production function towards the M_A axis in quadrant IV and moves point n leftwards along the horizontal line through n (recall B's production function is unchanged, as are both individuals' levels of need). It is evident that if A's capacity to benefit falls sufficiently far (but A's and B's needs remain unchanged), point n will lie to the left of the 45^0 line through S (see fig 4). It is perfectly possible, in other words, that adoption of the "distribution according to need" principle in a situation where needs differ may well result in a *greater* degree of inequality in health after treatment than was the case before.

Second, it would be pure coincidence if the "distribution according to need" principle resulted in a post-treatment distribution of health that lay on the 45^0 line through the origin in quadrant I. In other words, adoption of the "distribution according to need" principle is unlikely to result in the attainment of equality of outcome. In the case illustrated adoption of the "distribution according to need" principle does reduce inequality in health. But *elimination* of inequality of health (point e in quadrant I) would require a more unequal distribution of medical care than that indicated by the Aristotelian version of the vertical equity principle (point E in quadrant III rather than point N'). Fig 3 could, of course, be drawn in such a way that point n' lies on the 45^0 line through the origin (A's production function would have to be steeper than that illustrated though, of course, its slope would still only become zero at M^*_A). In general, however, there can be no assurance that application of the "distribution according to need" principle will result in equality of outcome.

In fig 3 the assumption of resource scarcity is crucial. If the budget constraint had cut the dotted line linking the origin and point N to the south-west of N, the budget constraint would not have been binding and adoption of the "distribution according to need" principle would have resulted in point n being attained in quadrant I where the post-treatment distribution of health is equal. The assumption of a non-binding budget constraint is, however, clearly difficult to justify. It is not enough to argue, as one occasionally hears, on grounds of need, efficiency or any other ethical principle, that the budget ought to be large enough for all needs to be able to be met. In a world of scarcity, this merely makes other budgets tighter still and eliminates the necessity for principled rationing in one sphere of activity at the expense of requiring even tighter rationing in others, some of which may be no less susceptible to arguments based on need. Moreover, fig 3 is a special case. In the more general cases where medical care is incapable of bringing everyone up to the same level of health, distribution according to need will not result in equality of health, *even when the budget constraint is non-binding* (cf figs 2 and 4).

5. Where does this leave "need"?

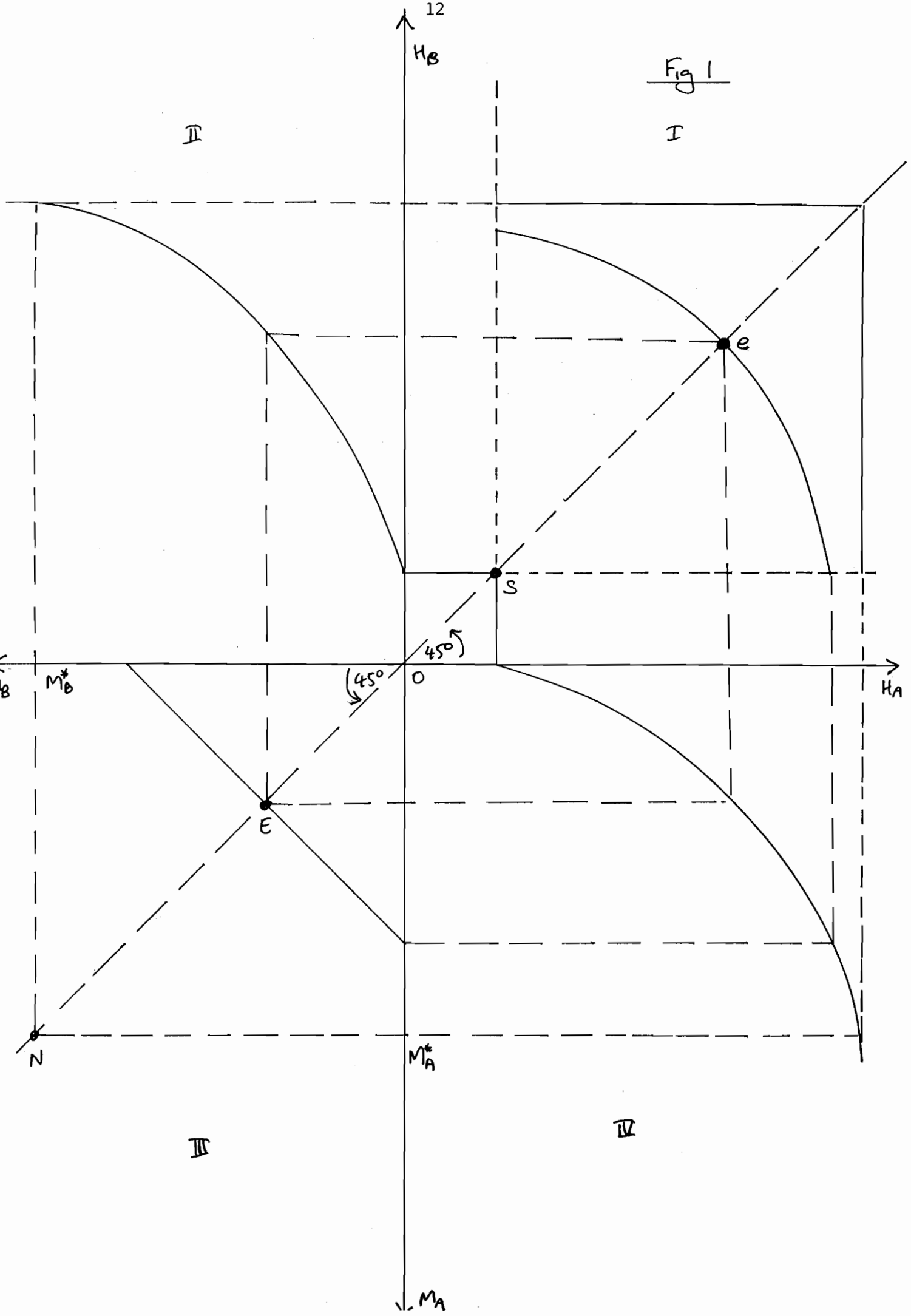
In the light of the above, we now think it misleading to say that "need is not itself a basis on which distributive judgements can be made" (Weale 1978 pp71-2), or that "need cannot really serve

as the basis of an argument for a just distribution of income or goods" (Culyer 1980 p63), or that "distribution according to need" is a "red herring" (A Williams 1988 p117), or that "the criterion of equal treatment for equal need cannot in itself provide a basis for determining an equitable allocation of resources" (Wagstaff 1991 p31). It is evident from the above that need *can* be defined in a way that would appear to make sense and that resources *can* be distributed according to need. What we *do* claim is that, contrary to what is frequently argued, there is nothing inherently egalitarian about the principle of "distribution according to need". Indeed, as has been seen, adoption of the principle in the context of medical care may result in there being greater inequality in health after treatment than before. Indeed, the "distribution according to need" principle may actually generate inequality where none existed before.

That "distribution according to need" cannot apparently be justified by an appeal to egalitarianism does not, of course, mean that the concept of "need" is irrelevant to resource allocation decisions in medical care. The justification for administering medical care is, after all, that it is needed. What the discussion above does suggest, however, is that the principle of "distribution according to need" must requires a justification other than an appeal to egalitarianism. It might be argued (though we have our doubts about the validity of such an argument) that the principle of "distribution according to need" might be justified by an appeal to efficiency rather than to social justice. Alternatively, it might be argued that the principle of "distribution according to need" is just in a sense other than promoting equality. One might be tempted to argue, for example, that the principle is intrinsically just and that no external distributive principle is required as justification. Such an argument seems weak, given the inherently instrumental character of need: just as the moral force of the notion of need derives from the ethicality of the goal of improving health, so too does the moral force of the principle of "distribution according to need" derive from the justness of the associated distribution of health. That is, of course, precisely why the principles of equality and "distribution according to need" are almost always coupled together. This leaves the possibility that allocating health care resources according to need typically generates a distribution of health that is just in some sense other than being equal. We have our doubts about this.

What *is* clear from the above is that the pursuit of equality of outcome requires rejection of the "distribution according to need" principle. The satisfaction of needs could, of course, still be coupled with the pursuit of equality. It is simply that, to paraphrase Weale (1978 p70), the notion of "need" picks out which resources are to be distributed and the equality principle determines the correct allocation of these resources. It is evident, however, from the previous section that adoption of this rule would necessitate a departure from the principles of treating persons in equal need equally and treating persons in unequal need in proportion to the relevant inequalities. It may, in short, be more egalitarian to treat persons in equal need differently than to treat them the same, and to discriminate more heavily in favour of those with relatively large needs than is warranted by the Aristotelian version of the vertical equity principle.

Fig 1



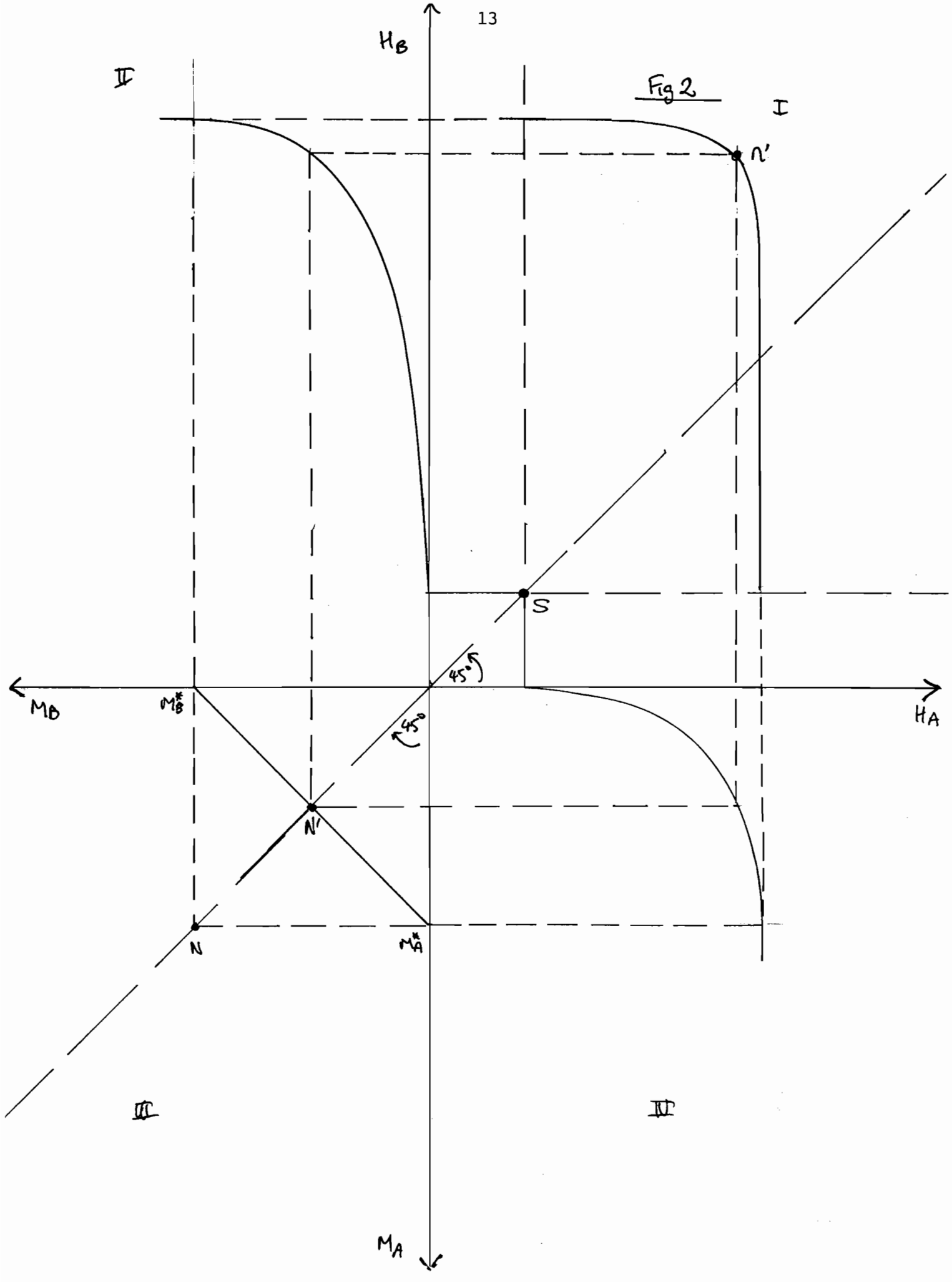


Fig 2
H_B
II
I
n'
S
45°
M_B
M_B^*
H_A
45°
N'
N
M_A^*
III
IV
M_A

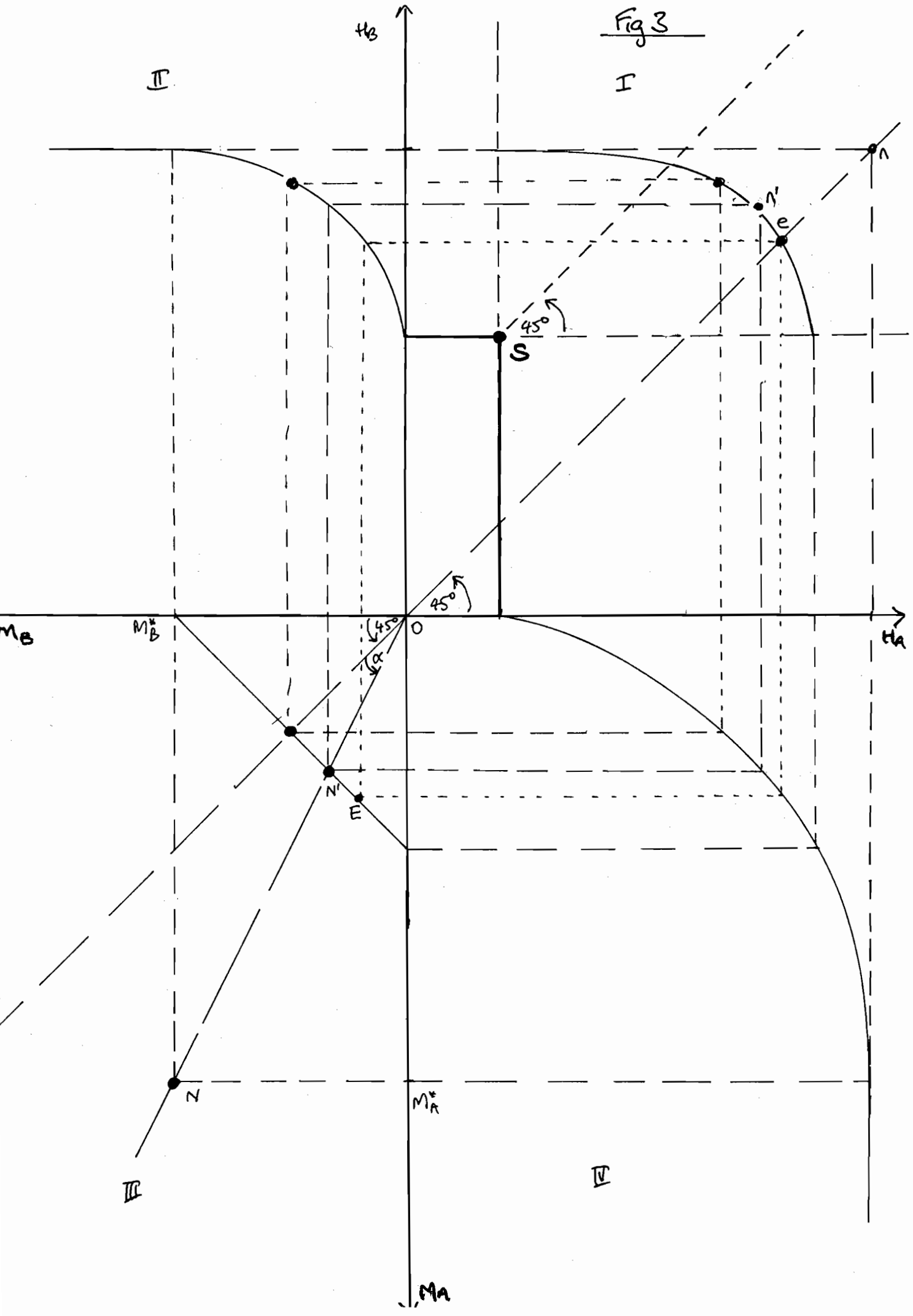


Fig 3
M_B
II
I
n
n'
e
45°
S
45°
M_B
O
M_A
45°
α
N'
E
N
M_A^*
III
IV
M_A

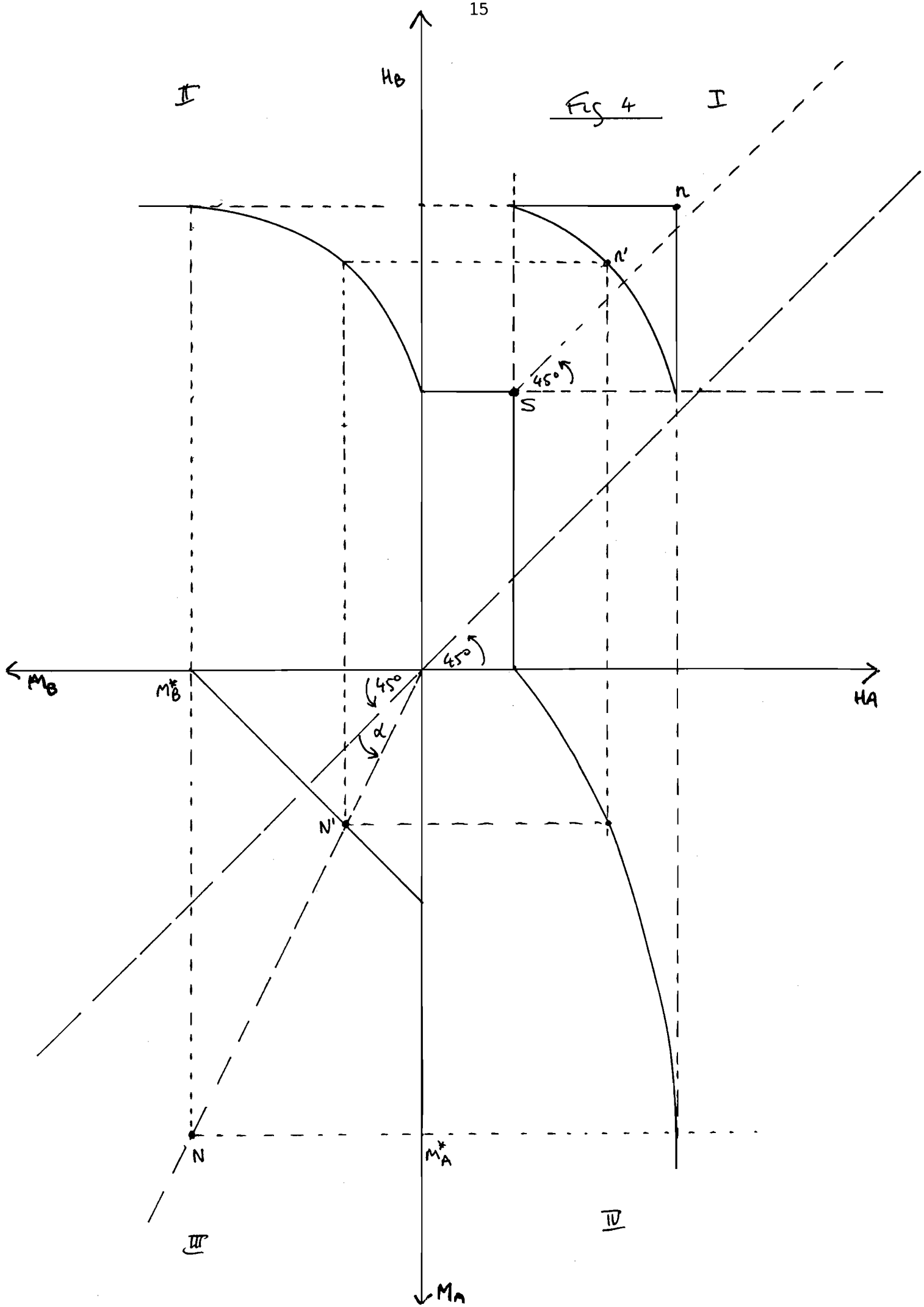


Fig 4

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