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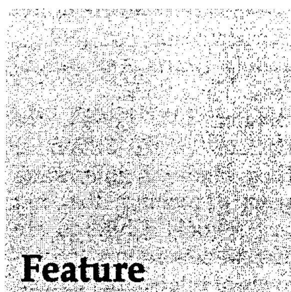

Reviews

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REVIEW ARTICLE

Towards a Global Theory of Health Systems: Milton Roemer's *National Health Systems of the World*

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A Global Theory of Health Systems

Milton Roemer's *National Health Systems of the World* [1,2] offers nothing less than a global taxonomy of health systems and with it the first steps towards a global theory of health systems. There could hardly be a larger or more important topic for health systems analysis. This paper reviews the taxonomy and theory in *National Health Systems of the World* critically but also constructively, arguing that Roemer's approach should be taken further, not discarded, and suggests one direction in which to take it further.

Social scientists and health policy analysts aspire to produce a scientific knowledge, indeed a scientific theory, of health systems for two reasons. One is purely scientific: to gain knowledge. The other is more practical: to discover new policy options, managerial and technical interventions that can be applied to or within a health system so that it more effectively or completely realises whatever broader purposes one attributes to it. A theory of health systems can be used to inform policy decisions about health system design and to base those decisions upon evidence. Whilst a scientific theory of health systems is certainly necessary for that practical purpose, it is not sufficient. The starting-point can only be policy—indeed ethical—assumptions about what the 'broader purposes' for health systems are. Such 'value judgements' originate outside a scientific theory of health systems. A critical analysis of health policy consists of collecting scientific evidence about what effects alternative types of health system (or parts of them) have and then ethically evaluating those effects against one's policy 'value judgements'. In turn, however, a scientific theory of health systems defines what 'value judgements' are tenable, because the scientific theory shows what range of health policy objectives are even theoretically achievable.

Because scientific and ethical elements co-exist and influence each other in critical policy analyses of health systems (and of social systems generally), the nature of science is deeply and fiercely contested within the social sciences which are brought to bear on health system analysis. Whilst the exact meanings of many of the following terms are equally contested, it is *relatively* uncontroversial to suggest that a scientific theory of health systems would at least specify:

1. What health outcomes each health system produces; and what impacts it has on the wider social system (e.g. on other economic sectors, labour markets, family life, politics and so on).
2. Which structural characteristics of health systems produce how much of each specific impact. For instance, a comprehensive scientific analysis of a health system would specify the contributions made to these outcomes by different payment and incentive systems, different patterns of ownership (e.g. whether hospitals are state or privately owned), differences in the scale and types of health service inputs (doctors, nurses, equip-

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ment, pharmaceuticals, etc.), different methods of financing and so on. To make such analyses, one has to categorise the different types of health system and then test the resulting categories for descriptive validity and explanatory power.

3. How, in turn, these structural characteristics arise from characteristics of the wider social systems in which the health system operates.
4. What types of health system structure there are and, by implication of the results of the above research, what types of health system structure there could be. Such an approach would place health policy making on a more evidential basis.

Health system analysts mostly attempt these four tasks piecemeal by a strategy of making relatively small-scale studies to explore relationships between relatively small numbers of these variables. The desired scientific theory of health systems is thus built up cumulatively, research project by relatively discreet and modest research project.

However another strategy is possible: start with a comprehensive set of descriptions of health systems, from which generalisations can then be abstracted. This is induction on the grandest scale. In principle, this strategy addresses all four of the above tasks in parallel. In two volumes, Roemer's *National Health Systems of the World* (NHSW) attempts this huge task; nothing less than describing the world's health systems and then drawing from those descriptions sets of empirical generalisations about what types of health systems there are, how they are structured, and the broad effects of each type in terms of its broadest health and non-health outputs. The scale of this project and of the possible resulting theory make it a possible foundation for a global theory of health systems.

His descriptions of health systems draw on Roemer's long career as a health policy analyst, researcher and expert advisor for the WHO and for various national bodies since 1950. Not surprisingly some countries (e.g. Republic of Ireland) are described relatively briefly and others (e.g. Iran) not at all. Nevertheless, Roemer analyses health systems in 65 out of the 168 countries in the world. Although some of the data are rather old (e.g. those on Israel are from the 1970s) [1], Roemer mostly uses data from the mid 1980s or later. Few if any living people could match this virtuoso breadth of coverage. For this reason alone, *National Health Systems of the World* is likely to be a standard reference work for a long time to come.

Roemer's Approach to Theorising Health Systems

Roemer's strategy of inducting empirical generalisations from a mass of descriptive material [1] faces a potential problem of circularity. When descriptions are formulated already using concepts from a pre-existing social theory, theoretical assumptions and even ethical positions can get absorbed into the 'descriptions' along with pure data. This is most noticeable when writers formulate their descriptions using terms and concepts that are alien or unacceptable to their readers. The point can be illustrated from this Marxist example which might be unacceptable to many including, probably, Roemer:

> 'As shown by partial evidence, the feudal or semifeudal character of Latin American structures in colonial days, in which the fight for a bourgeois dominance had to break aristocratic resistance and imperialistic dominance, suggest that principles like Franks' [advocacy of a 'medical police'] must have been applied in the sanitary policies in most of the countries' [3].

Such 'descriptions' give an impression that theoretical concepts such as 'bourgeois dominance' have been applied to the data rather than abstracted from them. Roemer anticipates this possibility, granting at the outset that his descriptions of health systems are sometimes theory laden; in his case, with categories from systems theory [1]. Some systems theory assumptions which Roemer applies in this way are relatively anodyne; for instance, his assumption that health systems comprise resources (staff, facilities, supplies, knowledge), organisation, management, finance ('economic support') and service delivery [1]. However others, such as his assumption that health systems are intended to

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achieve goals [1], are both contestable and important.

One way to analyse Roemer's analysis of world health systems is therefore according to how far the inductive generalisations it produces are theory laden or normatively loaded. On that basis, Roemer makes three main types of generalisation:

1. Concrete generalisations about how specific characteristics of specific health systems are connected, what forms of health system organisation emerge where, and why. These generalisations are relatively untheorised.
2. A taxonomy of health systems, summarising wide-ranging, more abstract generalisations about characteristics of whole health systems. If not yet a complete theory of health systems, this taxonomy would certainly form a large part of its foundation.
3. A historiography of health systems, i.e. a theory of the historical development of health systems world wide from their origins to the present. Roemer's attempt at this certainly claims a scientific basis. But it also has an ethical perspective which surfaces in such phrases as 'the long evolution of health service from a market commodity to a human right' [1].

The next three sections deal with each of these levels in turn.

Roemer's Concrete Generalisations

Concrete generalisations are the necessary starting point of any inducted theory, including an inductive theory of health systems. During his survey of national health systems, Roemer generates many concrete generalisations about how specific characteristics of specific health systems are connected. These generalisations remain quite empirical and relatively untheorised. One can illustrate them from three of the many health policy issues that *Health Systems of the World* covers.

Roemer infers some worldwide trends towards health gains during 1950–85 with LEBs rising, IMRs and CBRs falling in most countries, and worldwide mortality falling; TB fell 51% during 1948–71 [1]. Roemer attributes this partly to urbanisation. In most countries, town-dwellers have greater access to water supplies, sanitation and reliable food supplies than their rural compatriots, and to education (especially for women). He also detects more specific trends, for instance higher hospitalisation rates among poor people because they are likely to defer treatment longer than the more affluent [1].

Among his historical generalisations Roemer notes the fundamental role of medieval Christian bodies in founding hospitals and that the main source of new developments in scientific medicine shifted from Europe to the USA after 1900 [1]. He observes how the military mobilisation of health services has tended to stimulate the technical development of ambulance, surgical and nursing work especially [1]. At health care provider level, he infers that welfare-oriented health systems in transitional economies tend to have the biggest role for pharmacies as cheaper substitutes for the primary health care of poorer people, and comes close to suggesting that hospitals with unsalaried doctors (whether part- or whole-time) tend to have somewhat weaker medical professional discipline than those with salaried doctors only [1].

Alongside, he makes some preliminary re-categorisations of health system components. His category of 'private health care' covers traditional healers and black markets besides the more obvious commercial health care providers [1]. Displaying wide knowledge, he equally widely categorises magical and religious healers, empirical herbalist healers, traditional birth attendants, cult and sectarian healers (homeopathists, chiropractors, osteopaths, etc.) as 'traditional healers'. (However, Roemer also notes that osteopathy is increasingly merging with modern medicine [1].)

Roemer concludes the first volume of *National Health Systems of the World* with some bigger empirical generalisations about worldwide trends in health system development over the industrial period, in particular since 1945. Chiefly he notes trends towards ever 'higher' health care technology and greater health system utilisation, especially by urban populations

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[1]. Concommitants are an expansion of health system resourcing and a tendency for health system spending to rise as a percentage of countries' GNPs [1]. Governments tend to respond with cost containment measures, especially on the supply (provider) side of the health system, with efficiency strategies (substituting ambulatory for inpatient care, using generic drugs), primary health care and prevention [1]. Roemer also detects trends towards greater use of quality assurance and wider public participation in health policy-making to balance the trend towards medical domination of health systems [1]. In most countries, health policy is becoming an increasingly visible issue in national politics generally [1].

Illuminating as these concrete generalisations often are, they are essentially preliminaries to the larger project of a global theory of health systems.

Health Systems: Roemer's Taxonomy

Roemer also extracts generalisations of greater theoretical weight from his descriptions of world health systems. He does this by categorising health systems in two ways.

He firstly categorises the world's health systems as either 'entrepreneurial', 'welfare-oriented', 'comprehensive' or 'socialist' [1]. Each category groups specific sets of health system characteristics together, intimating that these characteristics are in some way causally connected. For instance, Roemer lists 17 typical characteristics of welfare-oriented systems [1]. What differentiates these systems is the degree and location of government intervention in the health system. For 'entrepreneurial' and 'socialist' systems this is obvious. But the welfare-oriented and comprehensive systems also differ in this way. In welfare-oriented systems (e.g. Germany and other countries where health care is financed mainly through social insurance), government intervention occurs predominantly in the financing side rather than the provider ('supply') side of the health system, whereas in comprehensive systems (e.g. the UK), the government intervenes in both the financing and the provider sides of the system [1]. Roemer thus classifies health systems according to the degree and type of government modification of the transactions and property rights normally found in markets.

Roemer also characterises health systems according to whether they are embedded in a 'poor', 'transitional' (or 'middle-income'), 'industrialised' or 'oil-rich' society [1], suggesting that health system characteristics also depend in a systematic way on their wider social setting. Summarising generalisations which Roemer himself presents less briefly and crudely, there are four main external determinants of a health system. First, the level of GNP per capita per year in its host economy determines what resources are available to the health system, in particular the supply of expensive resources such as doctors [1]. Second, although Roemer makes no claim to use the concept of 'culture' in any precise anthropological way, he cites cultural factors, above all technology, religion, community and family structures, as a second external determinant [1]. Third, external social determinants are primarily such factors as the degree of urbanisation and industrialisation, demographic structure and the demographic transition, and the openness of the host society to foreign trade [1]. By the fourth, political, determinant Roemer means above all the degree of government intervention in the market which is already accounted for in his first categorisation, but also the effects of militarisation and war [1]. By examining how external factors influence health systems, *National Health Systems of the World* starts to meet one of our initial criteria for a scientific global theory of health systems.

In all, four possible types of government intervention for each of the four types of society imply 16 possible categories of health system. But since no oil-rich countries actually have either entrepreneurial or 'socialist' health systems Roemer eliminates these two empty categories, leaving 14 fundamental health system types [1].

Certain assumptions enter Roemer's theory of health systems through these categorisations. One stems from a fundamental theoretical problem in systems theory (and in some other types of social theory), surfacing when Roemer describes health care at the whole-system level.

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Roemer is certainly not the only person who habitually mentions health system 'goals', 'purposes' or 'functions' [4]. Like social systems generally, health systems and health care organisations certainly produce specific effects which it is well worth theorising. But effects are not the same as goals or purposes. Only conscious beings (and not all of them) have goals and purposes. It certainly makes sense to say that the individual people who participate in health systems' and organisations' activities have goals and purposes, and to research what they are. But to impute goals or purposes to health systems or organisations is either a category mistake or an ellipsis. At best it is a shorthand, at worst an obfuscation, for the goals or purposes of the particular individuals who create, control or use health systems and organisations, whether as policy makers, managers, financiers, employees or as writers and readers of textbooks about them.

A Historiography of Health Care

Roemer's presupposition that health systems have a purpose (beyond those of the individuals who participate in them) also surfaces in another, more dramatic way. Roemer takes market-based health systems as the normal starting point for modern health system development. Not that Roemer advocates market-based health systems. He apparently regards the historical trend of health system development away from market models as progressive and broadly desirable. His review of the advantages and disadvantages of private health care appears on balance to favour non-private health care [2]. He notes that worldwide data imply that private health care makes virtually no contribution to reducing infant mortality [2]. Rather, his theory starts from an historical generalisation (with much basis in fact) that health systems in industrialised societies mainly originated as 'entrepreneurial' systems. The kernel of both Roemer's categorisations and his historical generalisations is to suggest a broad trend of development from entrepreneurial towards state-dominated health systems. This is at once both an empirical and a moral historiography. Empirically, it summarises general trends in health system development which only become apparent in retrospect [1]. But it also represents this trend as a trend towards access to health care becoming established as a human right, something which Roemer evidently thinks morally desirable [1].

Accordingly Roemer catalogues a variety of modifications to health care markets. They include the introduction of sickfunds, most often serving as a means of guaranteeing health care access for the poor but sometimes (e.g. in Kenya) as a means to make those who can afford it pay much of their own health care costs, and sickfunds which own and manage their own health care providers (as in Brazil) [1]. Alternatively, autonomous parastatal organisations can carry out many public health functions instead of the state (as in Tanzania) [1]. Elsewhere (e.g. Israel, Thailand, Turkey) health care markets are modified by the government providing health services but not financing them, charging patients for using public hospitals [1]. Alternatively, the government can make grants or subsidies to local non-state health care providers such as the Red Crescent or directly manage health services itself (as in the British NHS) [1]. Generalising from such events, Roemer detects a general historical trend towards an increasing role of the government in health systems, especially in financing health care, with the entrepreneurial model of health system in secular retreat [1]. He argues that US and European privatisation policies since the 1980s are likely to prove only a transitory phase although they seem, he concedes, independent of governments' stated political ideologies, occurring in regimes as diverse as the UK, Chinese Peoples Republic and Kuwait [1].

Wildly inaccurate as it would be to represent Roemer as a cold-war polemicist, his taxonomy nevertheless does reflect certain political preoccupations of that time. Then, a touchstone of political and social analysis was where a society or an economic sector fell in terms of the global political division between fundamentally market-based and fundamentally state-managed social systems. Roemer's is certainly not the only categorisation of health systems in terms of a state-managed *versus* free-market polarisation.

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Categorisations of health systems according to the degree of public control of system financing [4–6] and the widely used 'market *versus* Bismarckian *versus* state' classification) or health care production [7,8] do much the same. Other writers still more explicitly classified each health system according to which ideological and political 'side' in the Cold War it more closely resembled [9,10]. Reviewing Roemer's well researched and argued version of this approach is therefore one way of reappraising how to categorise health systems and analyse health policy after the Cold War.

At first sight it seems doubtful whether Roemer's distinction between 'socialist' and 'comprehensive' health systems is tenable at all. In both, governments intervene on both the providing and financing sides [1]. Both offer near-universal free access to health care. Any difference must lie in what Roemer calls the 'collective resourcing' of 'socialist' health systems, i.e. that they are embedded in a different type of host society than 'comprehensive' health systems [1].

Whilst the subject requires much fuller investigation than can be given here, a comparison of the fates of the British ('comprehensive') and the Soviet ('socialist') health systems during the 1980s suggests, however, that some of these cultural, economic, political and social determinants carry greater weight than others. Both of these health systems were subject to extensive governmental control on both their financing and their provider sides. A small private sector existed within and on the margins of each. Although there were differences in their managerial structures, especially in respect of the degree of medical professional autonomy, the British NHS was actually introducing much more centralised line management during the 1980s. Yet 'socialist' health systems stagnated and then collapsed in the Soviet bloc whilst a 'comprehensive' health system which was similar in terms of degree of government intervention, state ownership and line management centralisation not only survived in the UK but became rapidly more productive and (recognising the contested definition of the term) 'efficient' [11]. Indeed, the NHS model of the 1980s spread to Italy and Spain. Of course the glaring difference between the two health systems in the 1980s was the condition of their host economies. During the 1980s, the UK economy experienced some periods of contraction but also some of rapid expansion, in any case from a higher starting point than its Soviet counterpart, where the 'period of stagnation' ended in economic crisis and collapse. Empirically it is difficult to overstate the impact this crisis has had on the late Soviet and Russian Federation health system.

The fate of the 'socialist' health systems suggests empirically, and Roemer's own emphases on degrees of government intervention and the level of economic development suggest theoretically, that not all social determinants of health systems have equal influence. Granted, the Soviet health system's external resourcing difficulties were certainly exacerbated by its highly centralised and prescriptive line management system which, certain experiments apart, expanded Soviet health care by replicating the provision of doctors and hospitals rather than by innovating new models of care. This approach to management reflected management methods, belief systems and means of political control widely found in the rest of Soviet society. But as noted, Roemer appears to discount the influence of ideology on the balance between public and private health care [1]. So the obvious—perhaps only—way for Roemer to explain the above observations is by arguing that the USSR's terminal economic crisis effectively shifted the Russian health system from the 'industrialised' to the 'transitional' economic category; that the economic determinants are pre-eminent. Thus far, Roemer's taxonomy and its implicit assumption that a fundamental way to classify health systems is according to the character of the wider social system they are embedded in require little modification if any.

After the Cold War

Yet the outcome of the Cold War poses other challenges to Roemer's historiography and taxonomy. Not that the subsequent transition of 'socialist' health systems towards a 'comprehensive' or a 'welfare-oriented' model (depending

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on country) damages Roemer's taxonomy. He can simply remark that there are now fewer inhabitants of the 'socialist' category than in 1988, and apply similar arguments to the marketing 'reforms' in many European and some of the more developed Asian health systems since 1980. However, these events do weaken his claims about a worldwide historical trend towards ever-greater government intervention in health systems. After 1980, that trend seemed to reverse in Europe and parts of Asia; whether temporarily or permanently remains to be seen. As noted, Roemer sees the trend not only in empirical but also in ethical terms as a move towards health care becoming a human right, not as a commodity. This raises the question of whether his ethical standpoint is put in doubt along with the historical trend which he connects it to.

Yet there are four reasons why this is not the case. Firstly, when analysing historical trends one needs to be careful to distinguish events from ethics. This applies to health systems analysis too. Basing an ethical position on a historiography goes beyond what an historical theory of health systems can logically support. The fact that a trend exists (e.g. towards legalising abortion or medical dominance of health systems) does not in itself imply that the trend is either 'good' or 'bad' for particular individuals or for all of us; ethical assumptions have to be added from outside the historical or scientific theory to establish that. Neither, presumably, would Roemer himself wish his ethical position on health care access and human rights to be a hostage to the political upheavals since 1980. Those events do not necessarily invalidate his claims about human rights of access to health care nor their apparent corollary of the desirability of government intervention in the health sector. Warnings against mixing history up with ethics are not idle. Sometimes disingenuously, sometimes deliberately, many writers have advanced an essentially ethical position under cover of a scientific account of historical trends: certain Marxists and Darwinists in the nineteenth century, and more recently writers such as Fukuyama [12] gloating over the collapse of the USSR.

Second, the fact that 'socialist' health systems existed for so long proves them to be a viable health policy option. That level and kind of government intervention in a health system is certainly feasible over decades. (Whether it is desirable, or for what reasons, is another question.)

Conversely (and third) the collapse of 'socialist' health systems does not gainsay one fundamental reason why they (and 'welfare-oriented' and 'comprehensive' health systems) were invented in the first place: the problem of market failure in health care. Here we can take Roemer's own list of eight defects of the private health sector [2] a step further. His taxonomy of health systems implies a distinction between two types of market failure in health care. Different health policies are necessary for palliating each. What we can call 'market failure 1' is the oft-cited failure of health care markets to satisfy other, external policy or normative requirements which are typically formulated in terms of 'rights, 'needs', 'health gain', 'access' and other non-economic concepts.

By contrast, 'market failure 2' occurs because health care markets fail to satisfy what welfare economists regard as the conditions for the economic efficiency of markets. In the question-begging sense of the term that most economic theory uses, health care markets fail to be 'efficient' for well-known but narrower reasons: information asymmetry between doctors and patients; restricted competition; professionalisation; the existence of 'public goods' such as health promotion measures; and many others. It sometimes makes sense to analyse entrepreneurial health systems in terms of market failure 2, because that is to analyse them in terms of how effectively they function as markets, i.e. in terms of the health policy currently governing them (supposing that one accepts those demands to begin with). To analyse 'welfare-oriented', 'comprehensive' and 'socialist' health systems in terms of market failure 2 is to apply terms which are extraneous to the health policy governing them and which already accept that the desirable point of comparison is with a health care market. The test relevant to their health policy (and of their efficiency) is how successfully they redress market failure 1. Roemer applies that

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test to entrepreneurial health systems too [2]. Justifiably, because it is the only normative test of a health policy and health system which does not beg the policy question in favour of markets [13]. Although left-wing writers were also criticising the Soviet health system during the Cold War [14], the collapse of the 'socialist' health systems seemed in spectacular fashion to vitiate that policy solution to health care market failure 1. This becomes significant when considering how Roemer's taxonomy of health systems might be developed further.

Health Care and Property: Extending Roemer's Analysis

Roemer makes an explicit classification of health systems by type of property relation: an explicit classification by level of development of the economy within which the health system stands, and a tacit ethical standpoint similar to the WHO's advocacy of a human right of access to health care [1]. *National Health Systems of the World* does not present the links between these three elements, hence their theoretical warrant, in much detail. Yet it is possible to trace the missing links and thereby reconstruct a missing part of the corresponding theory of health systems. Starting from Roemer's main ethical assumption, the missing link between his ethical position and his empirical taxa can be reconstructed using a marketing concept. Then the connection between Roemer's two types of categorisation of health system can be explained by expanding a notion of 'property-relations' which underlies both. Figure 1 is an overall view of these connections.

At the outset we argued that one application of taxonomies such as Roemer's is to inform policy choices. Roemer reacts to market failure 1 by asserting a human right of access to health care as the ethical foundation for such choices. To realise this right would guarantee access to health care for the purpose that disease 'may be cured—or better, prevented— . . . or at least . . . [to] reduce the distress', enabling people to lead economically and socially productive lives [1]. Roemer is not proposing a universal right to all types of health care (e.g. exotic forms of cosmetic surgery, iatrogenic or futile treatments) but only to those types of health care which people need for the purposes stated above. Neither is he implying that everyone should have a right to all such services whether they need them or not, but rather that everyone who needs those services should have a right of access to them. (These sorts of ethical claims are more coherently formulated in terms of needs than in terms of rights. Roemer does not explore such questions in *National Health Systems of the World* but then his remit is health systems not ethics.) Roemer's account of health care rights centres on the health benefits of health care: on maintaining service users' health or, failing that, saving their lives, restoring function and relieving pain. Health care often provides many other benefits: relieving anxiety; demonstrating social solidarity; supporting other economic sectors; providing employment; compensating for the decay of family and kinship networks [15]; and so on. Roemer demonstrates as well as anyone how the exact list varies between countries, periods and providers. How to define and distinguish these different benefits is a complex problem in its own right, which *National Health Systems of the World* passes by. It assumes that the fundamental ethical test in choosing a health policy or type of health system is which form gives everyone who needs it a right of access to the health care they need for maintaining or improving their health?

In that case, though, the fundamental classification of health systems for purposes of critical health policy analysis is not after all according to how much governments intervene in them. At best the level of government intervention is only a proxy—rather an indirect one—for a more direct classification of what benefits users get (or do not get) from the health system. These criteria are: what types of health care actually exist; who has access to which of them; whether services are relevant to the needs noted above (some cosmetic surgery is not relevant; dialysis usually is); and whether the services are efficacious in meeting those needs [13]. (Only then can efficiency be considered. One cannot ascertain whether a health system is efficient without first specifying: efficient at what? [16])

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Ethical classification

How health systems differ in terms of users' access to healthcare benefits (e.g. disease prevention, pain control, restoration of function, etc.)

Classifications in terms of property-relations

Determines

Property-relation 1: Access to healthcare: classification by mode of access (free services vs. sale of healthcare vs. gatekeeping, etc.) to those models of care which are available (and noting those which are not)

Determine

Property-relation 2: Organisational types of provider (corporatised public body, informal carers, independent professionals, etc.) {*}

Determine

Property-relation 3: Type of mechanisms for provider entry, selection and payment (commercial vs. public competition vs. ministerial decision, etc.)

Determine

Property-relation 4: Organisational types of payer (individual consumer vs. commercial insurer vs. sickfund, etc.) {*}

Determine

Determine

Property-relation 5: Type of mechanisms for payer entry, selection and payment (commercial vs. public competition vs. ministerial decision, etc.)

Classification by type of host economy {*}

Scale and type of resource inputs

{*} indicates explicit classification criterion in *National Health Systems of the World*

Figure 1 Structuring the classification of health systems: Roemer's taxonomy and its missing links

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Given Roemer's ethical starting point, the fundamental classification of health systems must be according to which types of health care their users can access as of right, and which they cannot. People have a practical right of access to the kinds of health care that Roemer wants to guarantee only insofar as they can refer themselves, or get others to refer them, to services which are free at the point of use. However, most health systems also contain services which users can only access when a clinical gatekeeper, an insurer or other third party gives permission. Whether everyone who needs such services has a right of access to them then depends upon what substantive criteria the third party applies. Normally criteria such as clinical need, residence, citizenship or membership of a universal health insurance programme practically give the patient that right of access. Other criteria such as financial criteria (the patient's ability to pay) or entitlements based upon their employment, family status, or insurance subscriptions ordinarily would not. Yet a right of access to health care is empty unless health services having the benefits that Roemer stipulates actually exist. To specify what right of access a health system gives, one must also specify what kinds of health care benefits the right of access is a right of access to; which types of health care it makes available but not accessible to all users; and which types of health care it does not provide at all. For users, this is the most practically important property-relationship in a health system. Figure 1 labels it 'property-relation 1'.

Whatever benefits health care users do gain access to are created in the course of producing health care itself (unlike manufacturing where, say, food can be produced at one place and time, and consumed at another). Each distinct way of providing a specific health care benefit constitutes a specific model of care. What benefits health systems provide for their users thus depend on what models of care are available and who can access which of them. A model of care is constituted by specific types of intervention ('technologies') and a certain breadth of care. Usually a physical intervention is central but often health care includes one or more of: pharmaceutical services, psychological support, social support and help with the ordinary activities of daily life. All this is provided in a specific setting (hospital, the patient's home, a clinic, etc.) by specific types of health worker and all accessed through a specific type of referral route (e.g. by self-referral or referral from a doctor or the courts). In short, each model of care is a certain configuration of what Roemer lists as the resources of main health systems: physicians, other staff, drugs and supplies, health facilities and knowledge [1]. The point of distinguishing health care benefits from models of care is to be able to evaluate the different models as alternative ways of providing the same benefit. To illustrate: we will all need terminal care. Its benefit is that we die in the most painless and dignified way possible. Alternative models of terminal care include hospital terminal care *versus* hospice care *versus* terminal care at home, and so on. Above all models of care consist of specific types of health worker activities. But what determines these?

Implicitly—and correctly—Roemer assumes that this depends on further property relationships in the health system, which Figure 1 calls 'Property-relation 2': how health care providers are organised internally (which includes their ownership, but also includes their managerial and control structures, both formal and informal). Whether provider ownership is vested in the government or privately will determine what models of care are provided and why. The form of provider organisation determines what models of care the health system provides and hence whether patients receive the benefits which Roemer's ethical assumptions stipulate. These forms of provider organisation are thus a second-order determinant and an indicator (a proxy for a proxy) by which to classify health systems according to their capacity to provide users with the health benefits that Roemer stipulates. This is unsurprising.

Yet Roemer is also right for another less obvious reason. The property relations in which health care providers stand determine not only who owns what, but also what the health workers and provider organisations do *not* own, among the resources necessary to provide a specific model of care. Within a health care provider the flows of these goods and services culminate in health workers delivering specific models of care (and not others) to specific health

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care users (and not to others). What is significant, therefore, for realising the rights of access to health care that Roemer advocates, is how these flows of goods, services and money are structured and controlled. For that determines what health workers have to do in order to receive their own incomes, under what conditions and who decides these conditions.

What models of care are available in a health system depends not only upon how health care providers are organised internally, but in turn upon what types of providers can exist in the health system and which cannot. To compare health systems on that count, one must first know the full range of possible ways of organising health care providers. After the Cold War, Roemer's project of a global theory of health systems continues under one enduring condition and two new ones. As he tacitly recognises, market failure 1 remains an enduring characteristic of health systems worldwide. However, Soviet-style 'socialist' health systems now look less credible as a solution to it. Meanwhile the development of quasi-markets in European health systems since 1990 has widened the range of alternative possible solutions to health care market failure 1. Taxonomies reflecting Cold War health policy alignments have become unrealistically narrow. They either ignore or assimilate newer kinds of provider organisation, foreclosing of the range of possible types that are visible to a global theory of health system. That is not only a theoretical shortcoming in the terms noted at the outset. It also forecloses unnecessarily the range of policy options for health system design, not least for Roemer's own interest in overcoming market failure 1 and establishing a right of access to health care. Nowadays a list of provider organisational types would have to mention not only branches of health ministries, branches of local government, firms (including so-called 'not-for-profit' providers), individual 'free' professionals, charities and HMOs (all of which Roemer mentions), but also networks, quasi-organisations, corporatised public providers, fundholders, health worker cooperatives, GP consortia, patient self-help groups, and others [17]. A major health research task is now to extend and modernise Roemer's original categories of provider organisation.

What organisational types of provider exist (and which do not) in a particular health system depends on which health care providers are able to enter service in the health system, and of those, which are selected to survive. So, a way of classifying health systems which explains why its models of care are as they are, is by characterising its mechanisms for provider entry and selection. Among the familiar, explicit barriers to provider entry are legal or professional barriers (such as licensing, accreditation, professional registration) and administrative controls (such as planning permission or certificates of need). But new providers do not even reach these barriers unless they can first obtain the resources necessary for establishing and sustaining their work (knowledge, equipment, start-up working capital, etc.). A fundamental control on new provider entry, then, is who controls those resources and under what conditions they pass them on to potential new providers. From the provider's viewpoint, the daily flows of goods, services and money into it stem from its payer. The conditions under which the payer maintains these flows determine what types of health care provider are viable long-term, i.e. what types of provider the health system selects for. For example, a commercial health insurer pays a health care provider solely on condition that the provider has treated one of the insurer's own subscribers in a way satisfactory to the insurer; otherwise, not.

Provider selection occurs through providers' relationship with their payers. Forms of health care payer–provider relationship are thus a third-order indicator (a proxy for a proxy for a proxy) by which to classify health systems according to their capacity to provide users with the health benefits that Roemer stipulates. With payer–provider relationships, as with providers, a theory must first of all be able to recognise the full range of possibilities, and during the 1990s the range of types of payer–provider relations has widened. Among the mechanisms are commercial contracts (many varieties) and financial markets, which select for profitability. Many public sector payers offer semi-commercial service contracts through 'quasi-market' arrangements. Various national and local equivalents to GP fundholding have emerged. Some

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health systems (including the NHS, until 1991) continue to rely on administrative selection by external bodies such as accreditors or by the health ministry through line management, which select health care providers by policy criteria including putative health impact. Charities and health ministries sometimes make block payments or pay capitation fees for population access to services, making grants for non-recurrent (often 'capital') projects. Many health systems now select providers through some form of competition, with various loci of competition: price competition, non-price competition, competition for patient subscriptions, and so on. Some health systems have had weak selection mechanisms or almost none; the Soviet health system seems to have functioned largely in this way. In Figure 1, these relationships are labelled 'Property-relation 3'.

Payer–provider relations in turn reflect the organisational types of payer in a health system. For payers as for providers, their internal organisation—above all, the property-relations which it embodies—determines what resources it transfers (in payers' case, to health care providers) and under what conditions, and what resources a payer itself consumes in doing so ('Property-relation 4'). Here too Roemer rightly identifies the key explanatory variable; but , as with providers, the range of organisational possibilities needs updating (indeed almost constant updating during the 1990s) to remain empirically complete, let alone cover all conceivable possibilities. A complete list of these types would nowadays contain not only government bodies, social insurers, health care insurers and individual patients, but also fund-holders, HMOs, employers and others.

Roemer refers to all this as the 'financing' side of the health system [1]. His choice of word reveals a recurrent problem in taxonomies of health systems. The word 'finance' presupposes that this relation between the health sector and the suppliers of inputs to health care providers is inherently a monetarised relationship. Erroneously; for example, several governments have used the administrative direction of, say, health workers (especially recently qualified doctors) to remote rural areas or other areas of shortage. Although this verbal problem illustrates how important it is to avoid question-begging forms of words, more than a linguistic point is involved. To concentrate on money flows easily misses the point that for health care providers and patients, the function of the financiers is to enable health care providers to secure the resources from other economic sectors that health providers need as inputs in order to provide services. Thus one way to classify health systems is according to whether providers obtain these inputs from payers through markets (including capital markets); or by governments donating inputs in kind; or by local populations providing them in kind (e.g. charitably or as volunteers); or by patients providing them in kind; or in some other way. (To complicate matters, different routes might be used for securing labour, material goods, organs and blood products, information and so on.). Again, Roemer's taxonomy risks narrowing the range of health policy options in a question-begging way. Although the phrase is unwieldy and unfamiliar, health care payers are a special way of carrying out a function more accurately called 'health care input collection'.

What types of payer can exist in a health system, and hence what sort of property relations they will establish with the providers, depends in turn upon what the payers' property-relations with *their* payers are, and so on ('Property-relation 5'). One can repeat the analysis of property-relations through payers' relationships with, say, individual subscribers or the health ministry or employers until one reaches the boundaries of the health system. (Roemer's work also makes clear, how differently that boundary is placed in different countries.) There, one reaches the point at which the health system ingests resources from its host economy; not only the obvious resources of human labour and physical inputs (buildings, equipment, pharmaceuticals, consumables, etc.) but such resources as knowledge and models of managerial practice too. To obtain these resources is the payer organisations' specific function, although resources often enter health systems directly from the non-health sectors at provider level too (e.g. through volunteers, payments in kind, etc.) and at patient level (through self-care). To give the notion of a right of access to health care

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some content one must specify what models of care people have access to. Similarly, to give the notion of flows of resources a determinate content it is necessary to specify what kind of resources and how many of them are available, to feed into them. An overall constraint on what models of care are available and on what scale must also be what real resources are available to the health system as a whole. But this is exactly what Roemer's fourfold classification of levels of economic development specifies. The level of economic development of its host society is thus a final proxy indicator of how far a health system can provide the health care benefits that Roemer's ethical position stipulates. It is also the major determinant of what forms of ill-health, and how much of them, confront a health system in the first place. Here Roemer's two dimensions of health system classification and his ethical standpoint meet.

To summarise: Roemer's own ethical assumptions imply that for purposes of health policy analysis and critique, the fundamental classification of health systems is in terms of what access to what health care benefits it gives its users. To classify health systems in that way does indeed require the classification by host economy that Roemer makes. But it also requires that his classification by degree of government intervention be unpacked into the five distinct property relations outlined above (Figure 1), which it conflates. The taxonomy in *National Health Systems of the World* explicitly covers property relations 2 and 4, and the classification by host economy, but the others are only implicit.

Roemer's Contribution to a Global Theory of Health Systems

Notwithstanding, the foregoing arguments *National Health Systems of the World* has a more substantial theoretical basis than appears from a superficial reading. Its two axes of classification of health systems and its ethical standpoint have an underlying coherence. Their connection is obscure in the text but an analysis of health systems in terms of property relations brings it to the surface. Doing so provides a more complete framework for the central task of critical health policy analysis and takes Roemer's taxonomy a little further towards meeting the second of the criteria for a scientific theory of health systems noted at the outset; that of specifying which structural characteristics of health systems produce how much of each specific health and non-health outcome. Roemer's taxonomy implicitly regards the relationships between models of care, organisational type of provider, type of provider–payer relationship, organisational type of payer and type of interface between the health sector and other sectors all as empirical, causal (not definitional) relationships. In principle, empirical research can establish whether they exist and, if so, how they function and what factors complicate or confound them. Indeed one contribution that a taxonomy such as Roemer's makes to science is precisely by suggesting new questions and strategies for health system research, so that ultimately debates about health policy and health system design can be evidence-based to a greater extent. However, events since 1990 make it necessary to extend the answers which Roemer's taxonomy gives to the most fundamental health policy question of all: what kinds of health system could there be?

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COMMENTARY

Circumcision and Circumvention. Female Circumcision and Social–Moral Dissensus in Pluralistic Environments

Godelieve van Heteren

Editor's Note: This article is a commentary on a paper published in Vol. 6, No. 1 of *Health Care Analysis* [1]. There was insufficient room for it in that issue. It is included in the present Reviews section because it neatly summarises many of the features of the 'female circumcision/genital mutilation debate'. Interested readers are welcome to make further contributions on this matter.

Discussions about 'female circumcision' [2] have a tendency to become heated. When in 1994, on the occasion of the World Population Conference in Cairo, CNN broadcasted a report on female circumcision in Egypt, with scenes of a girl held down while undergoing her fate, viewers worldwide wrote in to express their horror and indignation. The response to that particular case in the media made it abundantly clear that it is not merely because of the mutilation of healthy female bodies that 'female circumcision' rests uncomfortably with many people both in Western and non-Western countries. Female circumcision emerges as one of the traditional practices which confront us with the most complicated social issue of our times: that of social normativity. Whoever has followed debates on female circumcision will recognise the extent to which they are an expression of the particular social–moral predicament of our age, an era in which people with conflicting social–moral agendas find themselves in ever closer contact with each other. It is hardly surprising, then, that discussions about female circumcision frequently end in dead-lock.

In what could easily be called the most nuanced ethical article on the subject in recent years, Lane and Rubinstein have criticised the fact that the impasse in which many discussions about female circumcision end, is often perceived as one 'between two well-meaning but seemingly irreconcilable positions: cultural relativism and universalism' [3]. In their desire to move beyond this broad moral antithesis, Lane and Rubinstein present the female circumcision case as a poignant example 'of the more general class of problems involved in intercultural reasoning in relation to intervention'. They conceive of the opposed views surrounding female circumcision as a case illustrating the implications of social normative dissensus. In their attempt to lift the debate about female circumcision unto the social-normative level, Lane and Rubinstein opt for a particular, behaviourist, angle on the matter. In my view, they stop short of declaring their own normative point of view. Instead, they elaborate how social–moral progress in increasingly multicultural environments can only be achieved if certain basic mental attitudes are cultivated. Issues as contentious as female circumcision can only be successfully addressed, Lane and Rubinstein

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