From Monopolies, Virtual Monopolies and Oligopolies to ... What? Media Policy and Convergence in South Africa and the United Kingdom

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Editorial note: This article was originally presented orally by the author, Richard Collins, as his formal inaugural lecture as Vodacom Visiting Professor in the LINK Centre, School of Public and Development Management at the University of the Witwatersrand.

Inaugural lectures have their own conventions and this written text reflects its original oral presentation and the convention that an inaugural lecture should address an intelligent but not necessarily expert public. Consequently, this text is, in parts, somewhat different from the usual form of article in a scholarly journal. Nonetheless, we believe the author's commentary is sufficiently acute, and his arguments sufficiently original and compelling, for us to publish it in this journal.

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Abstract

This paper reviews recent legislative and regulatory developments in South Africa and the United Kingdom, notably the South African Draft Convergence Bill and the UK's Communications Act 2003. The author considers these in the context of an international trend of legislating for "convergence" and focuses on the status of Internet regulation in both national jurisdictions. The argument is in favour of a regime of "general authorisation" of entry to electronic communication markets, rather than entry conditional on specific conditions of licence. The consequences of such an argument are explored in the context of South Africa. By considering John Rawls's arguments for "justice as fairness", the author assesses the impact of such policy alternatives on equity and universal service; and concludes that Rawls's arguments, while powerful and in some important respects persuasive, presume a fixed quantum of resources and do not, therefore, apply well to telecommunications. The conclusion is that Rawlsian arguments are insufficiently sensitive to the effects of the "network externality" and the opportunities presented by innovative tariffing, and that their application to problems of communications equity can thus lead to sub-optimal outcomes.

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Introduction

In this article, I review and compare the recent initiatives in South Africa and the United Kingdom (UK) to legislate and regulate for convergence. I take "convergence" to mean an increasing substitutability between hitherto separate media of communication and a consequential weakening of Governments' ability to set terms for entry to communication markets. Recent UK legislation reflects this presumption and leans towards promotion of entry, in order to foster competition, whereas South Africa remains more strongly oriented towards entry control. At first sight, South Africa's policy orientation seems justified in the interests of improving access to communication (universal service) and in the interests of equity. It seems to be consonant with John Rawls's principle of "justice as fairness" and acting to advance the interests of "the advantage of the least favoured". However, through consideration of a concrete example of telecommunications network architecture and tariffing, I suggest that a Rawlsian model may not produce optimal outcomes. I argue instead for the potentially superior ethical merit of a regime of "general authorisation" of market entry, rather than entry on specific licence conditions (e.g. conditions designed to improve equity and universal service), and conclude that Rawls's model of justice as fairness is insufficiently dynamic.

Both South Africa and the UK have recently published Bills aimed at improving their respective regulatory regimes for convergence. The UK's bill was adopted by Parliament and the resulting Act – the Communications Act 2003 – became law on 29 December 2003. Thus far, South Africa has not progressed its Draft Convergence Bill of 2003 into law but in other respects South Africa has led developments, not least by establishing its converged regulator, the Independent Communications Authority of South Africa (ICASA), in 2000 – three years before the UK's Ofcom opened for business.

"Convergence" means different things in different places and other countries have also established regimes of converged regulation. Several European Union (EU) member states - Finland and Italy, for example - have established a "converged" regulator. And the United States' Federal Communications Commission (FCC) and Canada's Canadian Radio-television and Telecommunications Commission (CRTC) are also cases in point. But what is meant by regulating for convergence is not always the same. The Finnish FICORA, for example, has responsibility for regulating postal services (whereas in the UK postal services are the responsibility of PostComm) and Italy's AGCOM has more responsibility for press regulation than does either the UK's Ofcom or South Africa's ICASA. Germany is different again and proposes an integrated regulator for the network industries (electricity, gas and telecommunications), whereas both Ofcom and ICASA regulate only communications. Further, the organisational structure of apparently "converged" regulators may also differ in significant respects; some "converged" regulators maintain organisational arrangements that map closely onto "unconverged" media - what we might call "legacy" media distinctions (the FCC is a case in point, with bureaux for media, wireless and wireline communications), while others have striven to emancipate their internal organisational arrangements from "legacy" media type distinctions (AGCOM, for example, has commissions for infrastructures and networks and services and products).

Convergence is shorthand for the coming together of hitherto distinct infrastructures and content streams into a single, interconnected network running on common standards and carrying a single digital bitstream — an instance of what Wikipedia calls the merging of "information technologies ... to become a united whole". But convergence is not just a process of integration; it is also a growing substitutability between media, platforms and distribution infrastructures. As hitherto distinct elements become acceptable substitutes for one another, so markets and media converge and a regulatory regime — based on distinctions between technologically distinct media, such as

¹ At http://en.wikipedia.org/wiki/Convergence_%28technology%29, accessed on 01 November 2004.

wireless broadcasting, wired telephony, the letter post and email, hard copy newspapers and online news services) – loses its power to secure the goals for which it was established. Hence, therefore, the tendency to adopt a single set of competition based principles when legislating and regulating for convergence.

The UK Communications Act 2003 is the latest stage in an uneven, protracted but seemingly inexorable, transition from a UK electronic communications regime of monopolies to one based on competition. Fifty years ago, the UK had a monopoly, state owned broadcaster and a monopoly, state owned telecommunications service provider (with the quirky exception of the city of Hull, where a municipally owned telecommunications monopoly operated) as well as a postal monopoly. In 2004, none of these monopolies remain. Fifty years ago competition in UK media and communications was confined to the press sector, and there arrangements could most charitably be described as oligopolistic. Price competition was weak and entry was restricted due to a combination of distribution monopolies, very high entry costs, union closed shops and so on.

The UK print sector is still oligopolistic, but less so than before. A number of new dailies and Sundays have entered the market (although local newspaper markets have tended to become more subject to monopoly, and ownership of local titles has become increasingly concentrated), the most striking example of which is *The Independent*, owned by a figure familiar to students of the South African press, Sir Tony O' Reilly. But in electronic communications, 20 years or so after liberalisation, the end of monopoly has come. The UK has literally hundreds of telcos and scores of television channels and radio stations. And in March 2004 competition in UK postal services entered a new stage, with Deutsche Post securing access to the Royal Mail's distribution network. Postal services are "interconnecting" in the same way as telecommunications networks.

The process of liberalisation began in 1954, when the UK established a commercial challenger, ITV (Independent Television), to the British Broadcasting Corporation (BBC) monopoly. In 1984 the Telecommunications Act enabled competition to emerge and challenge the incumbent monopoly British Telecom (BT), first through duopolistic competition and then through full competition. Liberalisation has produced creditable results. In the UK, voice telephony teledensity is close to 100%; 75% of UK adults own or use a mobile (cellular) telephone (Oftel 2003); 48% of UK homes have Internet access and 18% have broadband; 56% of adults are regular users of the Internet; and 61% have used the Internet at some time (e-envoy, 2003: 6-7). However, the old state monopolies still have high market shares. In first quarter 2003-4 in the fixed-line telephony market, BT had 57% of calls and 82% of lines (Oftel, 2003a) and the BBC has a 38% share of the television final consumption market and 53% of the radio market. The story in some important sectors is thus one of transition from monopoly to oligopoly rather than from monopoly to real competition.

Nonetheless, the strength of the incumbents notwithstanding, the UK has experienced a decisive shift in its organisational paradigm. Rather than controlling market entry it has moved, with the qualified exception of broadcasting, to a regime of general authorisations, where market entry is encouraged in the interests of promoting competition rather than controlling entry through licensing. This, and the official embrace of the doctrine of "convergence" manifested in the creation of an integrated (or more exactly not wholly disconnected), policy and regulatory regime is fully consonant with trends in the EU – notably those embodied in the 2002 telecommunications "liberalisation package".³

² Radio share data at www.rajar.co.uk/INDEX2.CFM?menuid=9, accessed on 11 August 2003. Television share data derived from ITC Annual Report, 2002 at:

www.itc.org.uk/itc_publications/annual_report/2002/Overview_of_Commercial_TV.asp#market_size and www.itc.org.uk/latest_news/press_releases/release.asp?release_id=683, accessed on 11 August 2003.

³ European Parliament and the Council of the European Union (2002, 2002a, 2002b, 2002c).

The UK Communications Act 2003

The Communications Act 2003 may be the longest Act ever to appear on the UK Statute Book – it has 411 clauses and 19 schedules and prescribes at least 260 separate duties for Ofcom. There is thus room for doubt as to whether the Government has succeeded in its aim to "simplify the regulatory framework" (DTI/DCMS, 2002: 3). Mercifully, the South African Draft Convergence Bill is considerably shorter with only 68 sections! The length and complexity of the UK Act and the number of duties it prescribes for Ofcom means, as the outgoing Chief Executive of the Independent Television Commission stated, that Ofcom cannot but exercise discretion in prioritising its duties:

Ofcom has reminded us that Parliament asked it to deregulate while giving it some 260 duties, double those of its parent bodies. Wisely, Ofcom has committed itself to less but more effective regulation, aiming at strategic interventions to achieve bundles of results (Hodgson, 2003: 10).

Furthermore, the new policy framework established under the Act seems poorly endowed with the "resilience and adaptability for the future" (DTI/DCMS,⁴ 2002: 3) that the sponsoring Secretaries of State sought to achieve. This is not least because the Act is drafted to exclude the Internet – a curious omission, perhaps, in an Act that is supposed to be both forward looking and technologically neutral, but one of which the Government was fully aware. Indeed, the sponsoring Secretaries of State themselves stated, "it is not the intention ... to extend regulation into the Internet" (DTI/DCMS, 2002: 48).

The exclusion of the Internet from Ofcom's jurisdiction will mean that regulation in the UK will not be fully "converged" (or technologically neutral) because video signals transmitted over different paths will be differently regulated. "Broadcast" (whether over a wired or wireless infrastructure) signals will fall under the jurisdiction of Ofcom, but the same content, if accessed over the Internet, will not. The Act further discriminates between different technologies, for example, clause 316 provides Ofcom with powers to direct holders of broadcasting licences – but does not empower Ofcom to do the same to providers of electronic communication services. Many of these confusing and contradictory provisions are owed to Parliament, for the Act was extensively discussed in both the House of Commons and the House of Lords and also by a Joint Parliamentary Scrutiny Committee. Consequently, some provisions of the Act, notably on broadcasting, reflect the particular concerns of individual Members of Parliament (and of successful lobbyists).

⁴ Department of Trade and Industry/Department of Culture, Media and Sport.

⁵ The official Explanatory Notes to the Act state that "material from a stand alone site, whether it be text, web-cast or video images" shall be excluded (Parliament, 2003, clause 526). This contrasts interestingly with the provisions in the South African draft Convergence Bill, in which content is defined as "any sound, text, still picture, moving picture or other audio-visual representation, sensory representation or any combination of the above which is capable of being created, manipulated, stored, retrieved and communicated electronically, but excludes content contained in private communications between consumers" (Republic of South Africa, 2003, Section 1).

The UK Act can be best understood as a move to a regime of competition based regulation of the electronic communications sector but with five main areas of exception to this principle. The Act liberalises electronic communications markets by:

- establishing a regime of general authorisations rather than specific licences except for broadcasting;
- liberalising national, and concentration of, ownership regulation (but retaining some prohibitions of concentration of ownership and introducing a public interest test for certain cross-media mergers); and
- introducing spectrum trading.

The Act establishes Ofcom as the lead competition authority (sharing concurrent powers with the Office of Fair Trading, or OFT). However, as the No. 10 Strategy Unit (i.e. the Prime Minister's Office) has observed, Ofcom's most important sectoral competition powers derive from transposition of the relevant EU Directives in the Act:

In dealing with SMP,⁶ Ofcom's powers will be largely determined by the EU regulatory framework. This framework restricts the majority of regulatory activity to those instances where there is SMP as identified by the process of market reviews (Strategy Unit, 2002: 66).

The EU Directives "transposed" through the Communications Act 2003 – notably the liberalisation package of 2002 – have given Ofcom considerably stronger powers as a competition regulator than those enjoyed by its predecessors. Moreover, Ofcom's competition powers have also been strengthened (compared to those enjoyed by its predecessors) by the UK's Competition Act 1998 and the Enterprise Act 2002.

However, the Act identifies five major areas of exception to the general governing principle of competition based regulation. These are:

- spectrum policy;
- content regulation;
- universal service obligation (USO);
- ownership regulation; and
- public service broadcasting.

The Act's provisions, notably in its treatment of these areas of exception, reflect the well founded belief that markets and competition will not always be sufficient to realise acceptable social and democratic outcomes. In respect of the newspaper press, the UK market has been less subject to state management than have its electronic communications markets – state intervention in the newspaper market has been confined to cross-media and concentration of ownership regulation. The Communications Act 2003 continues to provide for media ownership regulation, although its requirements are less onerous than before. The most striking area in which the UK state still intervenes is in broadcasting. That the two publicly owned public service broadcasters, the BBC and Channel 4, together account for close to 50% of both radio and television consumption, indicates the high level of intervention in the broadcasting market.

⁶ Significant Market Power.

The South African Draft Convergence Bill

Turning to the South African Draft Convergence Bill; it is necessary to state that a visitor should exercise caution when commenting on a host's proposals. Comment always implies a norm and may sometimes veer into unwelcome and inappropriate prescriptiveness – whether by implication or direct injunction. It is uncomfortable for all to hear "oughts", implicit or explicit, issuing from the mouth of one who has neither to live with the consequences of his or her proposals nor is as deeply embedded in the relevant milieu as are his or her hosts. Nonetheless, I think it better to say something rather than nothing and so I shall turn now, somewhat diffidently, to South Africa.

As in the UK, South Africa has benefited from recent entries to the national newspaper market. Indeed, South Africa has enjoyed more new entrants to the newspaper market than has the UK. Nonetheless, the welcome growth in South African titles does suggest that sometimes resources can be spread too thinly. The segmentation of South Africa's newspaper markets – by class, region and language – mean, as Allister Sparks⁷ observed, that "there are too many low-circulation newspapers feeding off a relatively small advertising cake. The consequent shortage of revenue means newsrooms are understaffed" (2003: 92). However, in other domains South Africa's communications markets appear less open. Telkom still enjoys a monopoly in provision of fixed-line telecommunication services (in spite of Telkom's licensed period of exclusivity being scheduled to end in 2002) and has been able to set the terms for entry to some related and adjacent markets. The South African Broadcasting Corporation (SABC), with a c 71% share of television viewing and 75% of the radio market (SABC Report, 2002-3),8 is also strikingly dominant.

The South African Draft Convergence Bill identifies 17 principal objectives (clause 2), including:

- · universal provision of communication services and connectivity for all (2);
- encouragement of investment and innovation (3); and
- · promotion of competition (5).

These, and the 14 others, are worthy objectives. But their number suggests that ICASA will have to exercise a considerable body of expert judgement and regulatory discretion, for goals such as these are not always easily reconciled. However, I shall focus on South Africa's choice to control market entry through licensing of electronic communications providers in contrast to the UK's move to a regime of general authorisations (except in some areas of broadcasting).

Why licence? The South African Draft Bill sets out the reasons. Essentially they are to:

- manage spectrum and standards (clauses 35-39);
- impose conditions of licence empowerment, diversity of communities involved in provision (clause 14 and objectives 7 and 15); and
- realise specific objectives of:
 - ouniversal provision of communication services and connectivity for all (2);
 - safeguarding, enriching and strengthening the cultural, political, social and economic fabric of South Africa (8); and
 - promoting a broad range of content services in all official languages –providing a diversity of news, views, information and entertainment to meet the content needs of all South Africans (16).

⁷ Formerly Editor of the Rand Daily Mail (1977-1981).

⁸ SABC public service radio has a share of c 62%; SABC commercial radio a share of c 13%; SABC public service television has a share of c 56%; and SABC commercial television a share of c 15%.

The Draft Bill also proposes measures to liberalise markets, to ensure entrants have access to essential facilities on reasonable terms (40-52), to establish a complaints procedure and to advance consumer interests (clauses 53-60), although the latter measures do not, as currently drafted, provide adequately for consumer redress. However, despite the fact that the Draft Bill strengthens ICASA's independence and authority by removing the requirement for ICASA regulations to be approved by the Minister,⁹ powers continue to be reserved (Section 7) for the Minister in respect of:

- · spectrum management;
- USO: and
- international obligations.

These principles are not dissimilar to those embodied the UK Act. Where differences begin to emerge are in the South African proposals for Ministerial powers of direction on:

- application of new technology;
- financial regulation (presumably rate of return for licensees); and
- · pace and extent of network liberalisation.

The South African Draft Bill specifies a number of different classes of licence (although it is not always clear quite what distinguishes one class of licence from another) and the criteria for awarding provide (at 14.2) for empowerment of historically disadvantaged groups rather than, for example, prioritising network rollout, USO or development of competition. Concern appears to focus more on who shall have access to the artificially created scarce resource of the licence rather than on those to whom services should be extended.

The Draft Bill proposes to extend established licensing requirements in respect of content services (section 13.3.a). Content is defined in the Draft Bill as:

any sound, text, still picture, moving picture or other audio-visual representation, sensory representation or any combination of the preceding which is capable of being created, manipulated, stored, retrieved or communicated electronically but excludes content contained in private communications between consumers (definition in clause 1).

As drafted, this appears to be a significant extension of Ministerial powers of prior restraint. Happily, Minister Ivy Matsepe-Casaburri has disavowed this intention, since such provisions have an obvious potential to chill South Africa's Constitutionally protected principle of freedom of expression.

Of course, it is not yet clear what the future of the South African Draft Bill is to be. But the extant published draft is an interesting marker of a modest shift towards a new sort of regime in South Africa. Section 15, for example, provides for some unspecified types of service to be provided without a licence. However, the Draft Bill does not tackle some of South Africa's major policy challenges; notably, how to optimise use and development of existing assets such as Sentech's wireless networks (which might provide a basis for a third public telecommunication network) and the Eskom and Spoornet/Transtel infrastructures that are to form the basis for the long delayed Second Network Operator (SNO). Still less does the Draft Bill facilitate further market entry – entry

⁹ The principles of transparency and consultation are weakly present in section 7.7, where the Minister is not required to consult either ICASA or more widely.

that would enable new providers (with appropriate regulation to ensure that incumbents do not anti-competitively lever their market power) to compete away rents, if any, enjoyed by the Telkom incumbent and any second and/or third public networks.

The Internet sector in South Africa

The absence of such measures underpins the concerns expressed by South African telecommunication users – not least by key players in the Internet sector. Consider some representative critiques of the absence of competition in fixed-line telecommunication and related markets:

The biggest issue in all our lives is the Telkom issue. It has become huge. If the government doesn't do something soon, Telkom could destroy this whole market ... It's ridiculous; your monopoly supplier is your biggest competitor. 10

The biggest inhibitor is the high price of bandwidth. Small businesses ideally need unlimited bandwidth at a fixed price in order to make it work for them and their customers. ¹¹

Such critics' concerns seem well founded. South Africa has c 3.7 million Internet users, but access growth rates are in decline – in 2003 connectivity grew only c 6% whereas, in previous years, growth rates were higher. In 2002 growth was 7% and in 2001 20% (World Wide Worx, 2004: 62). South African Internet Service Providers (ISPs) are classified as VANS (Value Added Network Services) and are thus required to obtain facilities from Telkom (which also competes in the ISP market) for a key input. An estimated 70-80% of ISP costs are the VANS charges paid to Telkom (Gillwald, 2004: 28). It is not surprising, therefore, that the non-Telkom sector of the South African VANS market has declined. In 2004 the South African Competition Commission found Telkom had acted anti-competitively and recommended a fine of 10% of turnover (c R3.7 billion). The recommendation is now under consideration by the Competition Tribunal but changes have not yet taken effect. 12

I focus on the Internet for two reasons. First, it is paradigmatic of convergence – the driver of re-regulation and the flood of new communications law around the world of which the UK and South African initiatives are representative. Kevin Werbach, of the United States' Federal Communications Commission's Office of Plans and Policies (FCC OPP), crisply focused this proposition in his challenging analysis of the impact of the Internet on both communications markets and communications regulation. Werbach contended: "The Internet is substitutable for all existing media. In other words, the Internet potentially poses a competitive threat for every provider of telephony, broadcasting and data communications services" (1997: 1).

¹⁰ Mike Brierly, Managing Director, MTN Network Solutions, in World Wide Worx, 2004: 96.

¹¹ Says Perlman, at www.itweb.co.za/sections/internet/2003/0312051041.asp?O=S&CiRestriction=leon%20perlman, accessed on 30 March 2004.

¹² See Bloom (2003) for melancholy confirmation that the time taken for competition authorities to hand down judgements may be protracted.

My second reason for focusing on the Internet is because it in turn focuses a fundamental ethical issue in communications policy, to which I will now turn. It might be objected that competition based, converged, regulation and pro-Internet policies, which would mitigate the problems that I have indicated above, would cut across South Africa's USO. When 70% of South African households lack fixed-line connectivity, why focus on the minority, three and a quarter million or so, of South African Internet users?¹³

Here the issue is the extent to which the claims of the un-telephoned and Internet users are rival claims. They may be thought to be so. It would be hard to argue that all the resources – human, financial or material – required for advancing the interests of Internet users are irrelevant to the task of making wired voice telephony accessible to all South Africans. But it would also be hard to argue that the un-telephoned would not benefit from the efficiency gains to the South African economy, the amortisation of network costs over larger volumes of traffic and so on, which would accrue from a more efficient and effective South African Internet. And, as I hope to show, the disadvantaged do stand to gain (although not immediately) from the establishment of advanced IP (Internet Protocol) networks.

Ethical issues

Determining the balance of advantage, or harm, that might accrue from, on the one hand, policies designed to improve the accessibility and functionality of the Internet in South Africa and, on the other, policies designed to extend voice telephony services to those who are currently denied them exemplifies one of the classic problems of utilitarianism. Here, as is often the case, it is difficult to know which of rival courses of action will better achieve the classic utilitarian goal of the greatest happiness of the greatest number.

But USO is not just a utilitarian issue. It is also an issue of rights, fairness and justice. And here I want to ask whether, and if so in what circumstances, it would be unfair and unjust to make claims for the literate, comparatively wealthy and, doubtless, disproportionately white population of South African Internet users – when there are unsatisfied claims of the illiterate, poor and preponderantly black population lacking basic wired telephone service.

I will short circuit important empirical questions here – like the relative importance of wired versus wireless telephony; reasons for the decline in the number of Telkom's wireline subscribers (a loss of over 2 million subscribers on fixed network during Telkom's period of exclusivity); and price increases of over 27% percent a year (despite stated efficiency gains, including job losses of around 30 000). I will try to focus on what seem to me important, and not straightforward, questions of principle. I will draw on John Rawls's influential arguments for "justice as fairness", which have plausibly been claimed to have decisively re-orientated and re-invigorated modern political philosophy, and will explore how far Rawls's ideas are applicable to some of the communication policy challenges faced by South Africa.

¹³ An estimated 1.75 million corporate users, 1 million dial-up users and 0.47 million academic users (World Wide Worx, 2004: 61)

¹⁴ Rawls's *A theory of justice* was first published in 1971 and reissued, revised, in 1999. Will Kymlicka, for example, referred to Rawls's *theory of justice* as giving rise to the "rebirth of normative political philosophy" (Kymlicka, 1990: 9). Rawls died in 2002.

Rawls and telecommunications policy

Let me begin by posing the question: Does justice require that everyone has the same? Or to frame the same question a little less starkly: Should public policy aim to minimise inequality? If so, it would seem straightforward to say that until everyone has basic telephone services (and other basic services) no-one should have enhanced services. Or, to put it less dog-in-the-mangerishly; new resources should be directed to improving the position of the worst off rather than improving the position of the better off. This, broadly I think, paraphrases the core principle of the systematic consideration of justice and fairness elaborated by Rawls.

Rawls proposes a "difference principle" whereby all "social primary goods" – rights, liberties, opportunities, income, wealth and so on (Rawls, 1999: 79) are "to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured" (Rawls, 1971: 303). The attractions of this position are obvious. But it is a remarkably absolutist position. Almost any expenditure or investment made that did not benefit the absolutely worst off person would seem incompatible with Rawls's principle of difference.

One of Rawls's principal interlocutors, Robert Nozick in his *Anarchy, state and utopia* (1974), set himself to arguing for the legitimacy of certain kinds of inequality. Nozick argued, among other things, that inequality that derived from the exploitation of legitimately gained advantages might be just. He gave the persuasive example of the wealth enjoyed by sports stars – wealth that has accrued from the willing payments of people like us. Are we, Nozick asked, to be denied the possibility of paying from our legitimately gained resources to watch Venus Williams, if the consequence of our doing so were to be growth in the inequality between Venus Williams and all of us? Surely not. However, unlike the difference in sporting skills (and the wealth that derives from them) between Venus and us, it would be hard to argue that social and economic inequality in South Africa generally derives from the exploitation of legitimately gained advantage; quite the reverse. One might thus conclude that Rawls's principle of difference should prevail – distribution should be unequal and in favour of the massively least favoured in South Africa. 16

In terms of telecommunications policy (and leaving aside the rival claims of provision of universal access to clean water, electricity, healthcare, education and housing etc.) a rollout of universal access to voice telephony in South Africa should, under a Rawlsian set of values, seem to take priority over improvement of enhanced and Internet services. And, rather than a European style doctrine of general authorisation, the established South African model of restricted entry to telecommunication markets through licences with universal service conditions should continue to prevail. Here, let us leave aside for a time the obdurate empirical question of the effectiveness of South Africa's USO policies (see Gillwald, 2003) and stick to the issues of principle.

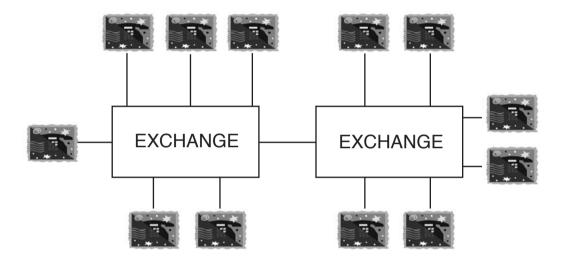
¹⁵ I quote from the first version of *A theory of justice*, because in his revisions Rawls softened this definition subsequently formulating it as "all social values – liberty and opportunity, income and wealth, and the social bases of respect – are to be distributed equally unless an unequal distribution of any, or all, of these values is to everyone's advantage" (Rawls, 1999: 54).

¹⁶ The South African Gini-coefficient (an index of income disparity – the higher the numerical value of the Gini-coefficient the greater the disparity between the income of the best and worst off) was 0.59 in 1995, an improvement from 0.68 in 1990 (Whiteford & McGrath, 1994: 73). Income disparity among black households has, however, widened, as is indicated by the increase in the Gini-coefficient from 0.35 in 1990 to 0.52 in 1995. Although the general distribution of income in South Africa has improved, the poorest of the poor have become even more impoverished, Anon, 1997: 56, from www.ngo.grida.no/soesa/nsoer/issues/economic/driver.htm, accessed on 22 March 2004.

Consider other objections to Rawls, ones I find more persuasive than Nozick's in respect of the issues under consideration. Rawls's model is undynamic – he constructs his distributional calculus as both a zero sum game and one where the goods that are up for distribution already exist. Rawls doesn't consider adequately the problem of creation of resources – in our case the provision of telecommunication infrastructures – and his system is, in consequence, static. Consider an example that will, I hope, illuminate this objection to Rawls's arguments.

We know that telecom tariff baskets are often constructed so that different classes of users pay different prices for the same service. Let us take a simple example: a straightforward two exchange network in which each exchange serves six customers and where the annual cost of the network is 1920 accounting units (dollars, pounds, euros, rand, it doesn't matter). If costs are shared equally, each telephone user pays 13.34 accounting units per month for service.

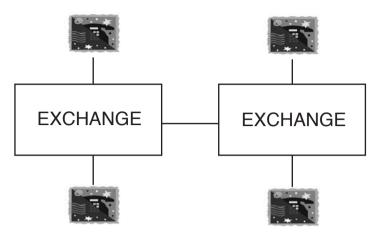
Figure 2.1: Illustrative 12 subscriber/2 exchange network (level pricing)



 Annual Network cost 1920 units. If customers split costs equally each pays 13.34 per month.

Let us say that this is unaffordable for eight of the 12 customers (and let us call those eight "residential customers"). The four remaining customers (let us call them "businesses") are left with all the costs (although these might fall somewhat as the number of customers falls – let us say to 1 200 units) and are considerably worse off; instead of paying 13.34 units a month each now pays 25 units.

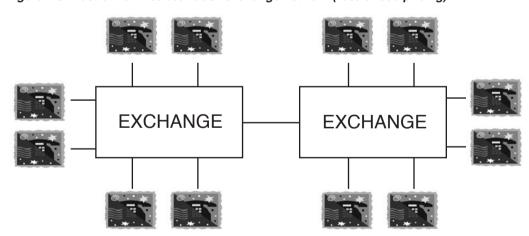
Figure 2.2: Illustrative 4 subscriber/2 exchange network



 Annual Network cost 1200 units. If customers split costs equally each pays 25 per month (i.e. each is worse off by 11.66 per month <u>and</u> can call/be called by fewer subscribers).

These remaining four customers, for whom prices have risen, will be better off if the eight lost customers return to the network and pay anything more than 7.51 units a month (reducing business customers' monthly charges to, at most, 24.98).¹⁷ Moreover, the business customers will benefit from the "network externality" by being able to communicate with the eight residential customers who have been attracted back to the network.¹⁸

Figure 2.3: Illustrative 12 subscriber/2 exchange network (rebalanced pricing)



 Annual Network cost 1920 units. 12 customers split costs <u>unequally</u> all are connected and benefit at, say, a price split of

4 customers pay 24.98

8 customers pay 7.51

¹⁷ The sums do not add up perfectly; but let us say the difference is accounted for by the costs of regulation!

¹⁸ Fod Barnes first developed this worked example, when a consultant at Oftel in the mid 1990s, and I have subsequently adapted and used it before (see Collins & Murroni, 1996).

Intuitively, I think we feel fairness is satisfied if the customers least able to pay are charged less than those most able to pay. All are better off, and the utilitarians among us are satisfied, if we contrive a tariffing scheme – such as that sketched above – that attracts and keeps as many people connected as possible. Rawls's difference principle also seems to be satisfied; the unequal distribution is to the benefit of the least favoured.

But the chances are that, in the real world, such a scheme will work only if the network is optimised for those who are paying the most. For they are the ones (le us call them the rich or business) without whom there would be no network. If they were to drop off the network, ¹⁹ or the network did not exist in the first place because regulation did not allow it to develop, the least favoured would continue to have nothing.

Thus, does the network not have to be created for the high payers first? And here we enter a space where we might feel unfairness is creeping back in. Yes, people are being treated differently; yes, priorities are being set to suit the advantaged (whether we call them businesses as I have done in this example, or we could call them the wealthy, the green, the blue or the white). But within these unequal arrangements there is the potential for all to be better off than they would otherwise be, even though, initially at least, the least favoured may not benefit. However, if we take a Rawlsian snapshot, static view, the initial expenditure on the network for the notional business users is illegitimate. It will not immediately benefit the worst off. Indeed, some of the users may never benefit. Perhaps they will die in the period between the construction of the network for the four business users and the notional second stage rollout of the network at marginal cost to the eight residential users.

But establishing a network is a dynamic process. Inevitably, when something new arrives access to it will be unequal. The first users are likely to bear significant costs (and bear the risks of backing the wrong technology or application), and are unlikely to do so unless they perceive that they will benefit. But their expenditure, and their demand, will provide the conditions in which others will be able to use the facilities established. The potential is there for the least well off to benefit under inventive and unequal tariffing regimes of the kind I've sketched above. Moreover, this is how, historically, electronic communications networks have developed, whether we take the history of fixed, mobile or Internet as our exemplar.

Let us extend the argument a little further. I have not considered what economists call the "externalities" that attach to the existence of well functioning telecommunication networks. I will not rehearse them all here but rather refer to the 1994 Reconstruction and Development Programme (RDP) of the African National Congress (ANC); that programme recognised the importance of the positive externalities that derive from an efficient and pervasive telecoms infrastructure. The ANC stated, "The telecommunications sector is an indispensable backbone for the development of all other economic sectors" (ANC, 1994: 34, paragraph 2.8.3).²⁰ Even those who lack access to the telecommunications infrastructure are likely to benefit, albeit indirectly, from a well functioning telecommunications infrastructure. It is thus not always obvious that redistribution, e.g. on Rawlsian lines, is more effective than increasing productive efficiency as a means of improving welfare.

¹⁹ Redistributive tariffing works, if there are no obstacles to establishing competing networks, only to the point where it is cheaper for high tariff users to remain on the network rather than to establish a new network.

²⁰ The RDP document continued, "An effective telecommunications infrastructure which includes universal access is essential to enable the delivery of basic services and the reconstruction and development of deprived areas" (ANC, 1994: 34).

In South Africa inequalities are grotesque. Arguing for importance of principles other than distributional equality doesn't mean redistribution is unimportant. But it has to be acknowledged that generally competition – rather than South Africa's conditions of licence based fixed-line USO strategy – seems to have been more effective in extending voice telephony services to the excluded. Mobile telephones, originally envisaged as a toy for the rich with a possible South African market of 200 000 users, have now become the pre-eminent means of making voice telephony accessible to the excluded. South Africa has three competing cellular networks with c 14.4 million subscribers. Innovative tariffing, community phone shops, and entrepreneurship by intermediaries has extended, and continues to extend, service. By contrast, Telkom's fixed-line monopoly, justified because of the promise it offered to extend wireline service to the untelephoned, has seen a fall in the number of subscribers – with all the wasted investment and infrastructure that involves.

Entry control and universal service in South Africa

One of the chief rationales for entry control via licences has been to ensure delivery of the USO and this is, in principle, a persuasive ethical rationale. An important objection to a regime of general authorisation is that justice and fairness can only be achieved through restricted entry and attaching redistributional conditions to licences. But this argument seems to me to be open to two sorts of objections. First, the empirical; it is not apparent that superior levels of justice and fairness have been better secured in the South African fixed-line market, where entry has been strongly constrained, than in the South African mobile market, where entry has been much less restricted. And second, the principled, Rawlsian, objection – that a general authorisation regime would not secure "the advantage of the least favoured" (Rawls, 1971: 303) – is flawed; both because it derives from too static a vision of distributional justice and because it departs too far from the characteristics of electronic communication networks. It promises to excessively chill development and deny all benefits that users might otherwise enjoy – albeit unequally.

Thus far, I think we have to acknowledge, the established South African licence based regime has not been notably successful in delivering the USO. Moreover, as I've argued above, a Rawlsian insistence on the legitimacy of expenditure only when it benefits the least favoured may lead to a blocked, static communications regime where, under Rawlsian principles, the investment necessary to create the infrastructures required for unequal pricing, which favours the least advantaged, may never be made.

What might follow from a South African policy regime of general authorisations? Almost certainly there would be a more productive use of existing assets where economies of scope apply, permitting firms such as Eskom and Spoornet to offer public telecommunications services. These firms are slated as making up the core of the projected South African fixed-line SNO, with Sentech as a possible Third Network Operator (TNO). And there may well be others. Telkom might well be incentivised under such a regime to put some of its underused assets – e.g. the unused loops connecting those who have dropped off its network – to productive use. Moreover, an open entry regime would mitigate the chilling effect of Telkom's un-customer friendly treatment of the VANS market – treatment that is plausibly seen as an important factor in South Africa lagging world Internet penetration and usage trends. An open entry regime would consequently be likely to reduce the deadweight of information search and transaction costs in the South African economy.

²¹ Doubtless, some of the success enjoyed by the South African mobile network operators is due to the inadvertent "infant industry" subsidy accorded to the networks by the underpricing, relative to international comparisons, of South African mobile network licences. Gillwald (2004: 7) estimates that South Africa's Third Network Operator (TNO) paid c US\$ 2.2 per head for its licence whereas Morocco's SNO paid c US\$ 39.47 per head.

Voice over IP (VoIP), which would undoubtedly become more widely used under such a regime, would certainly erode Telkom's monopoly fixed-line revenue base and its theoretical ability to cross subsidise socially desirable network rollout and use. But VoIP is happening anyway – and is probably unstoppable – and there is room for doubt as to whether the cross subsidy regime operated by Telkom has effectively rolled out and extended network access. Moreover, UK experience (and that in other countries where entry control has been reduced or eliminated) suggests that a fixed-line incumbent may retain market dominance for a long time after it is subject to competition, making it both possible and justifiable for regulators to require greater commitment to social goals from dominant incumbents than from new entrants.

None of these possible, and in my view likely, benevolent outcomes of a regime of general authorisations are, in principle or necessarily, hostile to the key social objective of extending access to voice telephony throughout South Africa. Nor is such a regime incompatible with an old fashioned USO fund to accelerate the build-out of wired and/or wireless networks. General authorisation does not mean *no* regulation; rather, it means encouragement of entry under common conditions conducive to effective competition. There is no reason why a levy, similar to the existing levy of 0.5% on turnover (*Telecom Amendment Act 2001*, Section 27), should not continue cutting in when firms' turnover exceeds an appropriate threshold. Indeed, it is quite conceivable that the aggregate resource available for underserviced areas would increase under such a regime of general authorisations plus USO levy.

Conclusion

Let me draw two sets of conclusions. First, a pragmatic conclusion: there are good grounds to suppose that a South African policy of general authorisations plus USO levy would not worsen the lot of the underserved. Indeed it would probably improve it. And such a regime would also be friendlier to the South African economy than is the existing regime of wired monopoly and an uncertain future of duopoly. Some would certainly gain; the disadvantaged would not be worse off and might well be better off. Only a rather dog-in-the-mangerish ethics (and sometimes it seems Rawls's ethics have that characteristic) would stand in the way.

And second, a conclusion of principle and one I am pleased to be able to make as an itinerant member of South Africa's leading university. The conclusion in principle is my modest chip in the towering edifice of Rawls's *Theory of justice*. His system of justice as fairness is, I think, a rather static system and one that leads to somewhat perverse conclusions when applied to electronic communication networks.

My title refers to monopolies and oligopolies, and you will doubtless have been unsurprised to learn that I am against both, although I acknowledge that one can have too much of the good competition thing — as the current structure of the South African press would suggest. But evidence would suggest that greater benefits do accrue from ready entry to markets than from restricted entry. And there is some strong evidence to suggest that South Africa is disadvantaged by lack of competition — that is by monopoly and/or oligopoly — in key market sectors. I would, therefore, suggest that a move to a regime of general authorisations is worth considering in South Africa. There seem to be good reasons to believe that such a regime would benefit the economy generally, would not worsen the plight of the disadvantaged and, indeed, would provide a basis for them to enjoy future benefits that would not otherwise be available. Neither the current licensing regime, nor that foreshadowed in the Draft Bill, both of which restrict entry, promise as much.

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