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Public Debates and Societal Deliberations: The Case of the Zambian National Consultation on GM Maize Food Aid in 2002

1.0: Introduction

Public debate about GMFs has emerged in southern Africa. It involves various enclaves. Scholarship on the question of 'conditions of existence' of such public debate is scanty. It is unclear *what* public debate is and *how* it works in reality. Using the case of the Zambian national consultation on GM maize food aid (2002), I conceptually analyze 'public debate'.

2.0: Context: The Zambian National Consultation on GM maize food aid in 2002

Prolonged drought which was attributed climatologically to the El Niño natural phenomenon struck southern Africa in the 2001/2002 season. Zambia, Malawi and Zimbabwe and three other countries in the region faced severe hunger. In the case of Zambia, where apparently controversy on GM maize was the hottest, the food shortage was so acute that some observers feared a humanitarian crisis especially in Zambia South if nothing was done to alleviate the ravaging hunger. In spite of continued refutation of media reports by government – about several deaths out of starvation and poor nutrition – many people died of hunger in Zambia. In response to the food crisis, United Nations World Food Programme (UN WFP) offered food aid in the form of maize. And then it was reported that some of the donated maize, especially that from the USA, was genetically modified (GM) maize, and UN WFP confirmed this report. UN WFP reportedly argued that it was not in a position to offer Zambia non-GM maize because the USA, the major donor of the maize to the UN WFP, did not customarily segregate non-GM maize from GM maize. Although some countries like Malawi, Mozambique and Zimbabwe accepted the GM maize aid from the USA, Zambia rejected it, fearing irreparable damage to human health and the environment, as well as unfavourable consequences on Zambia's international trade as well as small to medium scale food crop farming. The governments of Malawi, Mozambique and Zimbabwe decided to accept the GM maize food aid only on condition that it was milled before distribution to their hungry populations.²

When Zambia rejected the GM maize food aid, State President Levy Mwanawasa was on record as saying that he would rather have Zambians starve than let them consume "poison" (GM maize). *UN WFP* reportedly insisted that all it could offer to Zambia was GM maize since the USA was said not to have any way of separating GM maize from non-GM maize. Moreover, *UN WFP* argued that it was not prepared to scout for non-GM food, which was available in some parts of Africa like Kenya and Tanzania, because it wanted to get its food aid only through an open tender outside Africa. The USA had won this tender, and that was it. To reach this decision, Zambia had earlier on conducted a national consultation (in July and August 2002). The Zambian government organised the national consultation on whether or not it should accept the USA GM maize food aid. The national consultation involved meetings, interactive radio and television programmes

and newspaper articles as well as readers' letters to newspaper editors. Consequently, the government based its decision on the recommendations from the national consultation to reject the USA-donated GM maize.

The print media covered the national consultation, an exercise carried out mainly by the pro-government paper, *The Times of Zambia* and by the privately owned paper, *The Post*. Between them, *The Times of Zambia* and *The Post* carried close to a total of thirty (30) news stories on this national consultation on GM maize in the period spanning March-November 2002. Notably, *The Times of Zambia* carried only 5 of the 30 or so news stories, giving one the impression that this pro-government paper deliberately imposed a blackout on the issue or it did not find the issue newsworthy (of news value) and hence its scant regard of the issue. *The Post*'s coverage of the national consultation ranged far and wide, for example, from reports, reviews and comments, expositions, critical analyses of views of key representatives of science societies (University of Zambia scientists like Dr. L. Mumba and Dr. M.M. Lewanika), UN agencies like *WFP* and *FAO*, religious organisations like the *Jesuit Centre for Theological Reflection* (JCTR), the Zambian presidency, the Zambian Political Opposition, *European Union*, and the US government.

By contrast, The Times of Zambia did not carry any substantial news stories, say, in the form of critical commentary from newsreaders, or any substantial reviews, expositions and critical analyses of the issue. Not surprisingly, its report was nothing more than an uncritical partisan voice, offering blind support for the government anti-GM position. Nevertheless, The Post could not have been fully immune from ideological bias and polemics. Some critics saw The Post's wide, prolonged, balanced and critical coverage of the national consultation as only apparent; for example, that the media misrepresented the position of both the government and the donor community. The media were rash to paint the Zambian government as having rejected the US GM maize food aid donated by the UN WFP because the government was under pressure from the Green movements embodied, or manifested, in the European Union, which was alleged to have strong trade and commercial interests with Zambia for non-GM maize food and other non-GM food products produced in Europe; or the government was allegedly under extra pressure from either local or regional or international biotechnology activists or lobbyists such nongovernment organizations as Biowatch, Geneworld, Greenpeace International, and GM Watch. The USA itself was accused by the Zambian government and other stakeholders of trampling upon the 'dignity' of Zambians by foisting GM maize down the throats of 'famished' Zambians when it could have very well afforded to donate non-GM maize. Moreover, the USA was known to produce only 30% GM maize, and so, contrary to the then prevailing global expert opinion, the USA was seen, especially by Zambian scientists, to be capable of segregating GM maize from non-GM maize.⁵

Thus, Zambia's print media could not have been fully immune from ideological bias and polemics. Media reportage and commentary were bound to manifest ideological elements, underpinning positions of various stakeholders caught up in the cross-fire of positivist, technological development approaches and human health and bioethical as well as environmentalist concerns, a situation complicated further by the enigmatic

interplay of imperialist forces--wielding the coercive and manipulative power --of global capital over national capital largely through the *World Bank* and the *International Monetary Fund* as well as multinational biotechnology companies. Concerns about the media's misrepresentation of issues notwithstanding, the media were important in the 'take up' of the text of national consultation on GM maize in Zambia because, firstly, they highlighted ideological elements of interest groups in the national consultation and, secondly, they attempted to propagate a public idiom about biotechnology. Media defined and reinforced specific scientific 'truths and realities' and a specific moral vision.

3.0: The *Debateness* of the Zambian National Consultation on GM Maize Food Aid in 2002

Biotechnology is controversial in public domains because it is based on genetics, which is itself embroiled in controversy. An arena of public debate emerges around biotechnology worldwide. Societal deliberation on issues arising from biotechnology is evidenced in most parts of Africa, the southern African region included. Societal deliberation broadly covers 'interactive communication' or 'discursive exchange' of views on issues of general concern or interest. To this end, societal deliberation can take several forms such as talking, consulting, conversing, reading, writing, listening, or visualising. This entails that each communication form has a mode of addressability that generates or at least expects a response from the (real or imagined) addressee, or else all we have is monologue. Societal deliberation occurs in several domains such as village or area development committees, town councils, city assemblies, theatre, film, radio, television, newspapers, or music. The criterion here is 'interaction' or 'exchange'. I intend to analyse conceptually 'public debate' as a special type of societal deliberation, in which, I think, the element of 'interaction' or 'exchange' is taken to an impossibly high level of conceptual rigor, rendering the concept vacuous and programmatically useless for theorising about what is broadly schematized as public understanding of science. The overarching question then becomes: What are the conditions of existence of public debate on biotechnology in southern African societies? Or, more to the point: How is public debate on biotechnology possible at our societal level?

To avoid theorising in a social vacuum, with unbounded scope and generality and other entrapments, I isolate and examine critically—for purposes of conceptual clarification-- a claim made by a prominent Zambian scientist and politician, Dr. M.M. Lewanika (2004). Lewanika claims that the "national consultation culminated into a national public debate." At a conceptual level, an argument can be raised whether or not the Zambian 'national consultation' on GM maize food aid actually culminated into a national 'public debate'. An assessment of this argument should illumine or enlighten us about the conceptual quagmire in which the concept 'public debate' is swamped and how this obscurantism blurs our vision of public understanding of science in this region. We should bear in mind the bifurcation in the argument: debateness and publicness.

3.1: Did the Zambian national consultation become a debate?

The first fork of the argument can be assessed in line with Lewanika's claim that the national consultation *culminated* into a national public debate. The 'debateness' problem invites a basic question: what makes debate 'debate'? But, first, there is the problem of

author-motive: why doesn't Lewanika just leave the national consultation simply as a 'consultation'—why the conceptual intensification of 'consultation' to 'debate'? Presumably, the author has reasonable grounds for construing a conceptual shift from 'consultation' to 'debate'. Let us scrutinize this conceptual shift, initially, referring to the lexicon. Lexically, to 'culminate [from Latin culmen: summit] is 'to bring to the point of greatest intensity or climax'; it also denotes 'to give form or shape.' So Lewanika is at no point unclear about the 'original' nature of the societal deliberation; it was a consultation. The government was consulting its subjects about a decision it was about to make: to accept or reject the UN WFP's offer of the USA-donated GM maize food. The 'consultation' shifted to 'debate' (only) towards the end. What are Lewanika's premises in his claim about this *climactical* shift of the national consultation to a public debate? First, the national consultation drew on society-wide representation.⁷ The notion at play here is that of 'nation' as a 'popular public', or what Warner calls a "social totality."8 Second, the national consultation was *deliberative* (talk-centric and participatory) in that it was organised in various forms including meetings (discursive exchanges), interactive radio and television programmes and newspaper articles as well as readers' letters to newspaper editors. In short, the national consultation was *societal* and *deliberative*, thereby satisfying the requirement of societal deliberation: communicative interaction or discursive exchange. Thus, it can be safely argued that the national consultation was a genre of societal deliberation. But, in spite of all this, did the national consultation become a public debate? Sceptics give us a hard nut to crack here.

Let us look closely at the possible horns of dilemma, as exposed by our sceptics. We are further told that this apparently nation-wide representation gave an overwhelmingly unanimous 'no' to the GM maize food aid. Apparently, there were a few dissenting voices; Lewanika observes, "Only a couple of participants spoke in favor of accepting the GE Food Aid." The national consultation lasted two months (July to August 2002). Given this great unanimity, leading to the widest possible degree of consensus, our skeptics can tempt us to deduce that during this long period of societal deliberation there was little or no debate. Lexically, to 'consult' is not necessarily to 'debate,' our skeptics would be quick to point out. The conventional denotation of the term 'consult' [from Latin consultare: to take counsel] is 'to seek advice or information,' or 'to refer to'. Another denotation of 'consult,' that is the closest to 'debate,' is 'to exchange views; to confer'. Let us adopt the second denotation of 'consult: to exchange views or confer', and then envisage the possibility that societal deliberation on GM maize food aid involved some sort of discursive exchange of views, or conferring, our skeptics would still suspect us of stretching the point in according this exchange of views, or conferring, the status of debate. Our skeptics would further argue that conceptual-lexically, in a formal debate, debaters (contenders or contesters) take turns in presenting their respective arguments, identifying weak points in each other's arguments and presenting counter claims (counter conclusions) to challenge each other's claims (conclusions). The aim is to convince the audience and other debaters that one's argument is more cogent, i.e. it is an argument whose conclusion – claim – is based on sounder and stronger premises. ¹¹ In the Zambian case, our skeptics would complain, we are not informed about the bone of contention or the central issues of contestation, or intricacies of arguments vis-à-vis the national consultation. Instead, we are presented with an official addresser— the state - seeking nationalistic legitimacy for its political decision by appealing to the *social totality* 'nation'. For our skeptics, this social totality can be perceived as a single, all-encompassing 'false we,' that is, a totalizing collectivity that soliloquizes with itself, thereby generating and sustaining itself on naïve unanimity, peremptorily yielding pseudo-consensus on a complex issue that would otherwise have generated controversy in Zambian society.

If we were to fall prey to snares of our skeptics so as to be made to insist dogmatically, as they do, that debateness must have the characteristic mark of persistent and profound disagreement among stakeholders, then we would be driven to the conclusion that the national consultation did not culminate into a public debate. In reading with, rather than against, the (skeptics), we would find ourselves dismissing the Zambian national consultation, as a process of consultation by a government, which appealed to a social totality in order to endorse its plainly political decision. But, this conclusion would be hasty.

Why would this conclusion be hasty? In general, what are the blind spots in the premises in the argument which leads to this hasty conclusion? Firstly, the lexical definition is restrictive. Great unanimity on an issue does not preclude debate. Debate can lead to greater agreement even on a controversial issue. Secondly, we can question the formalistic-rationalistic axioms of debate. The theoretical legacy of the concept 'debate' is usually identified with the Project of Critique. There are serious conceptual difficulties in *either* representing *or* not representing societal deliberations like the Zambian national consultation as a debate. Generally, the concept 'debate' invokes quasi-utopian images of rational, critical and free societal deliberation, a communicative ethos that was archetypical of the Enlightenment. Indeed, today rationality is still by and large upheld as one of the basic conditions of the existence of debate. And yet it is far from clear what it means for debate to be 'rational' today.

This sort of scepticism about reason, at least in philosophical circles, can be traced back to Scottish philosopher David Hume (1711-1776). So the tale goes that Hume's scepticism about reason was so Pyrrhonistic that it influenced considerably Hume's younger contemporary across the English Channel, German philosopher Immanuel Kant (1724-1804). Arguing that reason is a slave of the passions (abstract of his *A Treatise of Human Nature*, 1739), Hume is alleged to have awakened Kant from his dogmatic slumber in the 1760s. Enmeshed as the youthful Kant was in the then prevailing Leibniz-Wolffian rationalism, Kant initially held a somewhat strong belief in the potency of reason. Kant's vindication of the claims of reason, which responds partly to Leibniz's quasi-religious belief in the potency of reason and partly to Hume's scepticism about reason, appears in his epoch-making *Critique of Pure Reason* (1781, revised 1787). Apparently, the question of rationality seems to have been abandoned to the vagaries of philosophical pastimes since the time of Kant.

Scepticism about reason reached its climax in the (arguably Marxian) Frankfurt School (especially in the seminal works of major proponents of its critical social theory, namely, Theodor Adorno, Max Horkheimer and Herbert Marcuse) which put an irreparable dent

on the quasi-utopian ideals and value-claims of the Project of Critique as propounded and championed zealously by Enlightenment thinkers like Kant. Rationality is undoubtedly linked closely with philosophy. Schrag discerns this link:

What does it mean to be rational?... To do philosophy, it has been assumed, is to put into play, in a variety of ways, the claims of reason; and to be a philosopher is to take on the mantle of the guardianship of rationality. 12

But, this apparent intimacy between rationality and philosophy is mutually risky to both partners; if one goes down so does the other. Kant's essay (An Answer to the question: What is Enlightenment? 1784) on public reason as personal courage to criticize authorities – in order for persons to escape from self-inflicted immaturity or self-imposed tutelage – is not very helpful here because, apart from its placing a high premium on the potency of reason, it is based on an un-argued, unarticulated, and hence dubious, assumption, namely, the private/public dichotomy. Thus, the portrait of the philosopher as the guardian of rationality and the putative claims of reason are susceptible to sceptics' ruthless attacks today. According to Schrag, it is not uncommon today to hear people talk derisively of "the poverty of reason," "the bankruptcy of the logos," or, catastrophically, "the end of philosophy." This contemporary 'war on reason' is more conspicuous and more ferocious in 'postmodernism,' where, despite its plurality of orientations, the problematisation of rationality is one of the recurring themes. Indeed, for Schrag, "the postmodern celebration of plurality, multiplicity, heterogeneity, paralogy, and incommensurability makes the task of finding a place for the claims of reason particularly demanding."14

In contemporary Anglo-American political philosophy, Rawls's project of political liberalism, which is grounded in the ideal of rationality (as reasonableness) faces challenges not necessarily from postmodernism but from multiculturalism, or similar theories about cultural diversity. Rawls's public reasonability – a complicated and yet crucial civic virtue – always requires liberal-minded people especially in a multicultural or culturally diverse polity to give reasons to different others for their demands in ways that they can understand and accept as reasonable. For Rawls, people should avoid simply stating their preferences and interests or making threats. People's reasons must be public, implying that their reasons should be capable of being understood and accepted by fellow citizens who hold different background beliefs, perceptions and attitudes – comprehensive worldviews such as religious, moral and philosophical doctrines – consistent with their status as free and equal citizens. The civic virtue of public reasonableness is complicated for it demands patience and tolerance as it usually involves listening to what one would (at least on the face of it) perceive as strange, appalling, and obnoxious views from different others, ¹⁵ among other ¹⁶ complications.

In spite of this scepticism about reason, especially in contemporary postmodernist and multiculturalist discourses, modern humankind stills uses and capitalises on the ideals and value-claims of the Enlightenment such as reason. People's motives and thoughts as well as thought-acts are still informed, illumined and guided by ideals and value-claims that were the archetype of the period of the Enlightenment. For example, Peperzak (1994) cites Enlightenment ideals and value-claims which are still held dearly today.¹⁷

Therefore, debate is possible and often a necessity in societal decision-making, especially on issues that are controversial, and conflictual. What remain contentious and contestable are the conditions of the existence of debate itself. To attribute or not to attribute the quasi-utopian quality of 'debateness' to the Zambian national consultation isn't the quintessential question here. Rather, the quintessential question is whether or not there was at the time some degree of communicative interaction or discursive exchange of views on issues of general concern or interest—whether or not societal deliberation took place, that is, Zambians talked to one another about the GM maize food aid in question. And yet our sceptics would remain indefatigable; they would go on with their scepticism, this time doubting the 'publicness' of the national consultation, and hence the second fork of the argument.

4.0: The *publicness* of the Zambian National Consultation on GM Maize Food Aid in 2002: Popular publics and text publics or discourse publics

We are told that the report that was sent to the government on the national consultation presented the latter as a national 'public debate'. Lewanika remarks:

A subsequent report of the national public debate on GE Foods recommended that the Zambian government should not accept GE Food Aid. The Zambian Government studied the report of the national *public debate* on GE and the recommendation that emanated from it. ¹⁹

The notion of 'public' as a "popular public", for example, a nation would be unpalatable for our skeptics. Our skeptics would summon the views of 'revolutionist' thinkers like Habermas (1989) and Warner (2002) to marshal their critique.

In a nutshell, Habermas's historiography of eighteenth century Europe—especially France—commits him to identifying the sphere of rational-critical debate, not with the state's 'political publicsphere,' but with the 'private public sphere' of the bourgeoisie and civil society. On a Habermasque reading, therefore, a state-organized consultation—a consultation under the aegis and patronage and agency of the state—lacks not only deliberative democratic value but also mass emancipatory potential. Warner's notion of *counterpublics* as subaltern discourse publics or as alternative power-domains for the voice of protest and resistance against the *status quo* provides our skeptics with additional ammunition.

Warner's notion of "a public" as a "text public" would further complicate our social imaginariness of publics of GM maize food aid in Zambia in 2002. For Warner, there can be an infinite number of publics (and counter-publics) within one *social totality* like the Zambia nation. A text public is "the kind of public that comes into being only in relation to texts and their circulation." The publicness of a text public is based on writing, speech, object, or performance. A public is not a crowd, or a concrete audience, or a group requiring co-presence. Physical space and physical presence and full participation are not the determinants of belonging to a public. ²² Circulation is fundamental to the constitution of text publics:

Without the idea of texts that can be picked up at different times and in different places by otherwise unrelated people, we would not imagine a public as an entity that embraces all the users of that text, whoever they might be.²³

Publics are constituted by circulating texts, which is the same thing as saying discourse constitutes publics, and hence the inclusive disjunction 'text publics' or 'discourse publics'.²⁴

Circulation has both notional and empirical aspects. Empirically, circulation deals with what is known about discourse publics which enables a scene of performativity or practical possibility. Notionally, circulation deals with the unknown about discourse publics which enables a scene of transformation. Circulation is not only inter-textual (or even inter-generic) but also temporal: for a text to have a public it must circulate through time; after all, conversation doesn't stop. Therefore, to confer *agency* on discourse publics is to promote misleading ideologizations and hence to entertain durable illusions. The reality of a public lies in its reflexivity "by which an addressable object is conjured into being in order to enable the very discourse that gives its existence"; that is, a public must have some way of being addressed (addressability) in discourse.

A text public is strange in that it is hidden from view. The strangeness of a public allows us to think of discourse not as a people and not as an actually existing set of potentially numerable humans. What is quintessential in the definition of 'text public' is its selforganizing ability. Self-organization entails independence or autonomy from the state, laws, formal frameworks of citizenship such as voter-participation in general elections, or preexisting institutions like the church. The self-organization nature of publics through discourse enables them to produce a sense of belonging and activity. Participation, no matter how minimal, in discourse is pointless if a public is powerless and if its deliberations do not translate into action. Thus, the addressability of discourse publics faces two challenges, namely, comprehension and action because "often one cannot imagine addressing a public capable of comprehension or action."²⁷ A discoursing public must be organized by something other than the state. An independent public is sovereign with respect to the state together with its political and bureaucratic apparatuses. Moreover, apart from its self-organizing ability, a text public is self-creating because a public is a space of discourse created and organized by discourse: "publics do not exist apart from discourse that addresses them."²⁸ This makes publics strange²⁹ entities, especially their antipathetic position against the state and the ideological machinery. And yet the state can have intellectual agency that is crucially useful in regard to policymaking, regulation and resource mobilization vis-à-vis biotechnology. Although this sort of antipathy is espoused usually as a bulwark against totalitarianism and hence the authoritarian and patronizing tendencies of states, I think that effective and powerful popular discourse, for example, public debate on GMFs, need not presuppose total independence of a discoursing public from the state machinery. Some publics that engage in discourse on GMFs can be state-organized; they can have political or polemical agency. Therefore, Warner's apparent antipathy to the state disempowers and paralyzes his 'publics,' and to some extent his 'counterpublics'. More on this immediately below.

4.2: Are Publics to be seen as Enclaves necessarily poised Against the State?

Although Fraser's appeal to social totalities like national parliaments as embodiments of "strong publics" "³⁰ essentially legitimates majoritarianism typical of popular democracies, she cautions us against the temptation to debunk the whole idea of states' 'political public spheres' as Habermas and Warner do. We can doubt Fraser's belief in parliamentary sovereignties as "strong publics" due to concerns about the 'fairness and free-ness' of electoral processes, in that parliaments are formed through majority vote, and are a result of populism. According to Furedi, electoral participation—through voting—in popular democracies is the pretence of participation; it is a commercialized form of social inclusion. Nowadays, the act of democratic voting is subordinated to the objective of retaining contact with people so that ultimately "contemporary populism has no wider purpose than to connect with people" and hence "institutions are less likely to be judged according to criteria internal to themselves than on their relevance and accessibility to a wider public."31 Parliamentarians seek their legitimacy, and mandate to make authoritative decisions, from popular publics who elect them into parliament. Popular publics can either be in the form of a social totality (the public of a polity like nation or people in general) or a concrete audience (a totality that is bounded by an event or physical space).³² But, in spite of all this, the antipathy against states' 'political public spheres,' such as the Zambian national consultation, seems misplaced for the very reason that representative-ness (publicness) and rigor and effectiveness (debateness) of societal deliberation, do not necessarily require attenuating, or debunking, the idea of the state.

5.0: Conclusion

There is little doubt that societal deliberation on GM maize food aid did take place in Zambia, in the form of a national consultation. By contrast, the decision by Malawi, Zimbabwe and Mozambique to accept the UN-WFP GM maize food aid was made only at state or government level. The people of these three countries were not consulted on the matter. None of these three governments conducted even a public opinion survey on the UN-WFP GM maize food aid. By conducting a national consultation on a controversial scientific issue, the Zambian government took a unique step towards deliberative democratic decision-making: it provided an open forum for society to deliberate on an issue of wider concern. But, given the conceptual quagmire in which the concept 'public debate' is swamped, there are no straightforward, discrete answers to the question: Was it a public debate? If public debate were conceived exclusively using the Habermasque blueprint of 'rational-critical debate,' then the Zambian national consultation case would not satisfy this rigorous demand. Nevertheless, to argue that the Zambian nation could not have debated about GM maize because it didn't understand, or was not even aware of, biotechnology is to subscribe uncritically to the deficit model which is open to question.³³ Qua the deficit model, one stands in danger of charging the Zambian nation with 'scientific illiteracy'—a subtle form of epistemological imperialism.

There are, however, (not so convincing) reasons for thinking so dangerously. In 2001, only a year before the national consultation was conducted, two Zambian scientists reported that societal awareness about biotechnology was "just beginning" and "disappointingly low" in Zambia.³⁴ The *education* system was poor; there were no courses on biotechnology even at university level. Scientific illiteracy was high. People

lacked interest in scientific issues. The agricultural extension system did not have the capacity and trained personnel to update farmers on latest developments in agricultural biotechnology: "many farmers knew little about GMOs and saw them as 'bugs' or 'monsters' that could have serious effects on those who consumed them."³⁵ There were no avenues for scientists to disseminate information to the people. People, including farmers, were ignorant of biotechnology: "A radio talk show just revealed that the public is essentially ignorant about current issues that underpin the use of biotechnology in agriculture."³⁶ The *media* in general lacked access to reliable information. The Internet was unreliable or nonexistent even for media personnel working on major national news media. The *language* of biotechnology was unknown to the media. Zambia had no policy or regulations on genetic modifications technology. It had no capacity to assess GMFs in particular or living modified organisms (LMFs) in general, for example, in terms of possible pollution of the environment or contamination of non-GM crops. coincidentally, the food crisis was preceded by general elections and hence the focus of the attention of the media on the general elections, especially the presidential polls. So, qua the deficit model, given this dismal and poor state of affairs in terms of knowledge and awareness about biotechnology as reported in 2001, the Zambian nation could not have been prepared and competent enough to engage in a rigorous public debate only a year later in 2002.³⁷ But, as pointed out earlier, this line of thinking amounts to imposing the charge of 'scientific illiteracy' on the Zambian nation.

The charge of 'scientific illiteracy' on the Zambian nation is preposterous and empty mainly because, once more, it is a form of epistemological imperialism, and that, theoretically speaking, it oversimplifies the public knowledge-attitude nexus. example, in the Euro-American cluster, increasing 'scientific literacy' about GMFs in particular or LMFs in general has not necessarily led to greater popular support for these new biotechnological innovations and their products. To the contrary, popular opposition to GMFs remains fierce in what are generally considered as 'scientifically literate' regions of the globe such as North Europe. Of course, we must acknowledge the 'activist wedge' driving between popular thought and 'unorthodox' science: the anti-GM activist voice is sometimes louder and sharper than that of the Euro-citizenry. For example, Greenpeace International continues to draw swords against, and sometimes it triumphs over, multinational GM biotech companies like *Monsanto*. ^{37,38} Be that as it may, ongoing research shows that the more knowledgeable people are about the new science the more skeptical they become in respect to its innovations, that is, "better informed respondents tend to be among the most skeptical when it comes to 'morally contentious' and 'nonuseful' sciences."⁴⁰ Apart from the usual media hype and the propaganda and influence of anti-GM activist groups most often operating under the rubric of the green movement, active popular dislike for certain innovations and products of biotechnology cannot entirely be attributed to poor public understanding of biotechnology, or people's biotechnological illiteracy or lack of biotechnology education. As some recent 'public attitudes' surveys conducted in the UK show, the relationship between public knowledge about biotechnology and public attitude towards biotechnology is complex, and so, for the sake of intellectual honesty, this relationship warrants closer scrutiny.⁴¹

Finally, I have argued that what is quintessential is societal deliberation, no matter whether we characterize this discursive practice as wholly or partly inclusive or exclusive of 'public debate' in the sense of Habermas *et al.* The definition of public debate is obviously in need of sharpening, and this will (partly) involve incorporating into it less formalistic and less rationalistic interactive and discursive forms of societal deliberation on matters of general concern or interest.

Notes

- ¹ Such as scientists, lay publics, civil society or faith and church organizations, politicians, among other stakeholders.
- ² See "Malawi to Mill GM maize Food Aid," in *Binas Online*, September 2002, at http://binas.unido.org/binas.
- ³ Other print media that reported on this national consultation included *Pan African News Agency*, Agence-France Presse, Associated Press of Canada, *UN Integrated Regional Information Networks*, *Reuters*, *Economist*, *Sunday Times*, *Mail and Guardian*, *Business News*, *Zamnet News*, *Guardian*, *BBC News*, *ISIS*, among others.
- ⁴ Lewanika 2004, p.3
- ⁵ Lewanika 2004, p.3
- ⁶ Lewanika 2004, p.2
- ⁷ It involved citizens and traditional leaders, state bureaucrats (for example, Secretary to Cabinet, the Chair), politicians, academics, foreign missions, public science institutions, members of parliament, scientists, university lecturers, senior civil servants, representatives of local and international NGOs, representatives of diplomatic corps, representatives of donors, and two government ministers. (Lewanika 2004, p.2).
- ⁸ Warner 2002, p.65
- ⁹ Lewanika 2004, p.2
- ¹⁰ Lewanika 2004, p. 2; my emphasis
- ¹¹Conceptual Dictionary, 1994, p.59
- ¹² Schrag 1994, p. 61.
- ¹³ Schrag 1994, p.61.
- ¹⁴ Schrag 1994, p.61
- ¹⁵ Kymlicka 2002, p. 289.
- ¹⁶ Public reasonableness poses another challenge in a multicultural polity. It requires one to make a conscientious effort to distinguish private beliefs, perceptions and attitudes from those which are capable of popular defence. It further requires one to try to distance oneself from one's own vantage point and then look at issues from others' viewpoints, which, obviously, would be different from one's own comprehensive worldviews. In a multicultural polity it is virtually hard to conceive what qualifies as 'a public reason'. After all, one might doubt the potency of public reasoning to adjudicate between conflicting principles and interests. The apparent impotency, or powerlessness, of public discourse requires theorists to further vindicate public reasoning, given that the universality and objectivity of reason itself remains contestable. When all is said and done, isn't public reasoning anything but a publicity stunt for democratic societal deliberation, that is, a sheer exhibitionist compromise and accommodation of unresolved and irresolvable but disturbing and destabilizing differences-- rather than for rigorous, free and open debate of important and urgent issues?
- ¹⁷ Such as, "The recognition of human rights, emancipation of humans from imposed authorities, the rejection of discrimination, the claim of equal participation in political decisions, the veneration of reason and its universal laws, in short: the ideals of modern democracy proclaimed by the English, French and German philosophers of the 18th century, still are the basic principles on which we build our social and personal practice" (Peperzak 1994, p. 456).
- ¹⁸ For example, why should debate always be rational-critical? What does rationality mean? What does critique mean? How we do we mitigate the potentially or susceptibly divisive and disruptive forces of cultural diversity in our search for 'greater democracy'? These questions are lingering against the background of well-intentioned liberal and deliberative democratic attempts to make societal decision-making practical, free, and more inclusive and more deliberative.
- ¹⁹ Lewanika 2004, pp. 2-3; my emphasis
- ²⁰ Habermas 1989, chapter 18
- ²¹ Warner 2002, p. 66.

²² Warner 2002, p. 71.

²³ Warner 2002, p. 68

Warner talks of the "autotelic circularity of discourse publics," implying the self-organizing, reflexive nature of publics. A text public is a kind of reflexivity in that it is a social space created by the reflexive circulation of discourse. Single texts do not create publics but the "concatenation of texts through time"—and so no single text, voice, genre, medium can form a public. Only when a previously existing discourse can be supposed and when a responding discourse can be postulated, can a text address a public, and the two texts are related socially. The relationship between the two texts is less argumentative and polemical than that which is readily imaginable via metaphors of conversation, answering, talking back; that is, public discourse encompasses the multi-generic life-world organized by a relational axis of utterance and response (Warner 2002, pp. 90-1, 95). ²⁵ Warner 2002, p. 97.

²⁶ Warner 2002, pp.67-8

²⁷ Warner 2002, p.69

²⁸ Warner 2002, p.72

²⁹ Apparently, Warner's notion of 'strangeness' of publics makes participation difficult to construe. For Warner, a public is constituted through mere attention. Publics lack institutional being. They are virtual entities, and not voluntary associations. Since a public exists only by virtue of address, it predicates some level of attention, however notional, from its members. Attention is less about cognitive quality than the mere fact of 'active uptake.' Attention as active uptake is indispensable. For example, any member who becomes inattentive to a particular discourse ceases automatically to be a member of the discourse popular in question. Given that the threshold of belongingness to publics is attention --active uptake-- publics can be understood within the conceptual framework of civil society, requiring free, voluntary, and active membership.

³⁰ Fraser 1993.

³¹ Furedi 2004, pp.92-3

³² Warner 2002, pp.65-6

The deficit model assumes that non-expert people such as lay publics, activists, civil society organizations, and politicians are scientifically illiterate and hence they need science education. The deficit model aims to enhance scientific literacy by popularizing science through public information campaigns—by scientists—in order to remedy people's disenchantment with science. See Sturgis, Allum 2004.

³⁴ Chinsembu, Kambikambi 2001, pp.13-14

³⁵ Chinsembu, Kambikambi 2001, p.15

³⁶ Chinsembu, Kambikambi 2001, p.13

³⁷ In the formal sense, there was general poverty of knowledge and information about biotechnology prior to the national consultation. Some "considerable discussion" did take place. But, this discussion appears to have been the prerogative of expert scientists, voicing concerns about GMFs. For example, some experts hoped GMF crops would redeem the "intensely poor" agriculture sector and revamp the "crises ridden agricultural economy," given that "small scale resource-poor farmers [...] produce over 80 per cent of the country's maize, the staple food crop." Since the liberalization of the economy in 1991 Zambia hadn't produced enough maize to satisfy its people's dietary demand. Unavoidably, Zambia was importing maize from such overseas countries as the USA, Canada and Argentina "where GM crops have already been commercialized." Liberalization of the market itself was a cause of concern among experts and political elites in Zambia because in the case of seed for genetically modified maize this liberalization rendered the local market exceedingly vulnerable to the monopoly and exploitation of foreign multinational seed companies, mostly from South Africa. But, these hopes and fears seem to have been entertained mostly by experts and political elites who had some rough idea of

the impact of the latest developments in biotechnology. The few experts who were engaged in "considerable discussion" were concerned more about the economic repercussions of biotechnology. "Although there are some dissenting voices amongst farmers exporting to the GM-free European market, most are more worried about the health of the market than the environment, biodiversity and health that have been raised in connection with GM crops in other parts of the world… Public debate about biotechnology that has swept other parts of the world has not yet hit Zambia." (Chinsembu, Kambikambi 2001, pp. 14-15).

"Greenpeace says Monsanto GM crop needs fresh data 16/02/2005 - GM food ingredients under attack, again, this week as environmental group accuses Brussels of 'exposing EU states' to risk from genetically modified corn. In a statement yesterday, Greenpeace claims the European Commission gave the green light to Monsanto's MON810 maize into the EU seed catalogue, without a 'comprehensive monitoring plan'". (See <FE>).

³⁹ "Greenpeace blocks Monsanto's attempt to patent Indian Wheat". Tue 27 January 2004. GERMANY/Munich (See <GR>).

⁴⁰ Evans and Durant, cited in Sturgis, Allum 2004.

⁴¹ The 2003 UEA-MORI UK Survey showed that 72% of British respondents knew that science makes life easier, that 80.6 % of them knew that science contributes to human progress, and that 70% felt the need for scientific progress. But 69% held suspicion about science and 57% feared science carries more harms than benefits. Another 2003 UEA-MORI UK Survey on public attitude towards GM food and crops showed that of the 1,363 British respondents, 53% were ambivalent whether GM food should be promoted or opposed. 29 % said GM food should be opposed; only 9% said GM food should be promoted. 56% said they believed GM crops could benefit people in developing countries; 17% didn't believe so, and 25% were unsure. (See <CSI>, <UEA>).

References

1.Books and articles

CHINSEMBU K. AND KAMBIKAMBI T. 2001: "Farmers' perceptions and expectations of genetic engineer ruing in Zambia" in *Biotechnology and Development Monitor*, 2001, No. 47, pp.13-14.

FRASER N. 1993: "Rethinking the Public sphere: A Contribution to the Critique of Actually Existing Democracy" in Calhoun, C. (ed.), *Habermas and the Public Sphere*. Cambridge, MIT, Polity Press, pp.109-42.

FUREDI F. 2004: Where have all the intellectuals gone? Confronting 21st century philistinism. London and New York, Continuum.

HABERMAS J. 1989: The Structural Transformation of the Public sphere: An Inquiry into a Category of Bourgeois Society, Cambridge, MIT Press.

KYMLICKA W. 2002: Contemporary Political Philosophy: An Introduction. Second Edition. Oxford, Oxford University Press,

LEWANIKA M.M. 2004: "Food Aid and Genetically Modified Organisms," <u>here</u> at the *Science and Democracy Website*.

PEPERZAK A. 1994: "Ethics in Our Time" in Stapleton T.J. (ed.), *The Question of Hermeneutics*, Dordrecht, Kluwer,

SCHRAG C.O. 1994: "Transversal Rationality" in Stapleton T.J. (ed.), *The Question of Hermeneutics*, Dordrecht, Kluwer.

STURGIS P., ALLUM N. 2004: "Science in Society: re-evaluating the deficit model of public attitudes," *Public understanding of Science*, vol. 13, pp. 55-74

WARNER M. 2002. Publics and Counterpublics. New York: Zone Books,

2. Websites

 $\langle CSI \rangle = \underline{www.csi.ensmp.fr}$

<FE> = www.foodqualitynews.com/news

<GR> = www.greepeace.org./india en/news

<UA>= www.uea.ac.uk/env/pur/appendix_g_final_ueaori_gm_food_questionnaire_2003.pdf

Posted: March 23, 2005

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www.dipmat.unipg.it/~mamone/sci-dem