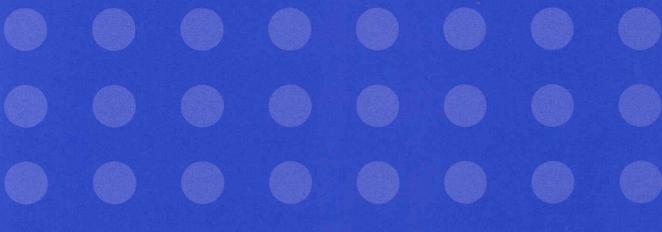


## Samuel Neaman Institute

FOR ADVANCED STUDIES IN SCIENCE AND TECHNOLOGY



## PRELIMINARY REFLECTIONS ON KNOTTY ISSUES

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## Preliminary Reflections on Knotty Issues

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TO: Zehev Tadmor

FROM: Sheldon Rothblatt

RE: Rethinking the Research University

Dear Zehev,

I have reviewed the materials that you sent regarding the project on "Rethinking the Research University" (noting the name change). I have not yet digested the Maltz Report, so the following remarks will not include my reflections on that inquiry. If some of the matters that I raise are in that Report, I will review them separately later on.

You ask whether the issues have been correctly identified. My initial reaction is that the materials indicate an impressive grasp of the leading issues confronting the functioning of the contemporary research university. The comments are wide-ranging, the issues are salient and the dilemmas are well-chosen. At this time I think two important problems are missing from the presentations. The first relates to the present nature and composition of Israeli society and the cultural features that make it unique. Policy recommendations can never be made without some solid assumptions about how the social and cultural systems work. The Israeli members of the Working Group of course have an implicit knowledge of how those systems operate; and while the outside members of the Working Group are not wholly ignorant of the main features of Israeli society and culture, these might be spelled out in some precisely relevant way in a subsequent document or report. I make this point because otherwise the specific problems mentioned in the materials simply resemble those in all industrialized countries today. Globalization and internationalization aside, national peculiarities still present specific challenges to science and higher education policy. The solution to a problem in one country will not be the solution in another.

The second omission I may have mentioned to you in conversation. It is not possible to discuss any part of higher education without discussing the character and expectations of students, their family backgrounds and prior schooling and in fact, special to Israel and other countries with National Service, their age distribution. Since so much of what we are concerned about has to do with the quality of research institutions, the preparation, ambitions and expectations of students entering the higher education system is a major determinant of the academic level of any institution, The question of the student is

vaguely hinted at in the documents but nowhere really addressed, except perhaps with respect to teaching at university level.

I can add a third problem, but it is one that you are already exploring with respect to the establishment of a sub-committee on the municipal and regional colleges. I am happy to see how quickly you moved on this matter, and it is bound to have good results. The emphasis will need to be not only on the quality and intake of the colleges, but their linkages to the university before the awarding of the B.A. degree that they are now empowered to provide and their relationship to the *Begroot* or any other school-leaving cum higher education entrance requirement.

Now let me turn to some of the issues that are raised in the readings. I found myself eager to engage in discussions with other members of the Working Group in order to clarify my own thoughts, but until we do that, let me state at the outset some of my own working assumptions and principles.

In the minutes of a meeting between you and other Israeli members of the WG, a suggestion was made that a useful heuristic device would be the construction of an idealtype university, a model of what the perfect institution would be like. In one of your own presentations you do in fact refer to intellectuals who have done precisely that, who have contributed to that English-Scottish-American-German debate usually summarized in the literature as "the idea of a university" (Newman, Flexner, Jaspers, Pelikan, etc). I can have no objection to this since I have written extensively on that aspect of the history of ideas. I only want to say at the outset that our primary task is likely to be problemsolving, especially with regard to external demands on the university. The constitution of modern society as both mass and plural, as polyarchical and democratic and resting on scientific foundations, creates a situation whereby all universities are constantly under public scrutiny. In some countries "public opinion" prevails. In others, the State appears to move independently of public opinion, although we know that the two are interconnected. In the United States the legal system and the judiciary have assumed a greater role in addressing issues that one might have supposed universities alone could or ought to handle. Several times in the readings I find references to Israeli "populism" and "fear of naked populism" that need to be spelled out.

In any case, what we have are a large number of practical problems, the solutions to which sometimes lie outside the capacity or authority of the institutions themselves. The best that can be expected, therefore, will be a series of compromises and tradeoffs, or a number of reforms less than ideal but able to provide the research university with sufficient legitimacy to function in a manner that enhances national and human goals. I believe that the readings lay out the rationale and aims of the modern university very well and its functions in generating and disseminating knowledge and serving society. So our task is to understand the particularities of the Israeli situation and to make suggestions that preserve the research university's ability to provide very high-level education while acknowledging the force of public scrutiny.

We all agree that a research capability of world quality is absolutely essential for any modern society. Israel has the additional need of enhancing the nation's productivity, military strength, professional talent and, to use an ambiguous word, culture, given the continual threats to survival by contiguous more or less feudal, authoritarian and hostile Middle East regimes. This point is made in passing in the texts. All nations face the quality issue, and it is an issue because none of us are ever certain whether our country's methods of evaluating talent and ability are generally effective or can be substantially improved. Even under the old elite systems, the research universities were certainly not drawing all the available talent simply because meritocratic criteria were not always employed. In the US I speculate that our leading colleges and universities did not become essentially meritocratic until after WW II.

The question of how to evaluate worth is extremely vexed, essentially because universities employ those criteria that suit their own interests. Therefore the creation of an opportunity structure that allows for a certain flexibility in selection has become a desirable goal. Most societies approach this issue by creating a differentiated system of higher education segments, or even (at least in the past) a differentiated system of secondary education. The critical element is how to link the segments. The American and particularly the Californian response as embodied in the Master Plan of 1960 tries to balance access to the higher education system and forward movement through student transfer arrangements. Preservation of quality is undertaken through the separate structure of a "graduate school" (with new adaptations appearing in Europe). Private elite institutions in the US are less concerned with access because they are not under the same level of public or legislative oversight, yet even their legitimacy rests on some perception that chances are being provided.

As the texts we receive state, the Israeli situation involves both acceptance and rejection of the principle of differentiation, acceptance insofar as the colleges have been given B.A. capacity and may be allowed to award the M.A., and rejection insofar as pressures exist to break down the binary line. But, as the post-Thatcher British situation so clearly demonstrates, destruction of the binary line leads to funding and policy anarchy and threats to quality in the form of deteriorating staffing ratios, inadequate funds for research, the abolition of tenure and some dubious fund-raising practices involving the running of overseas educational programs – Israel has first-hand knowledge of such outreach efforts.

No nation can afford to have a system of universities wherein all the institutions conform to some version of the research model. The issue that we must discuss is how to keep a binary line while maintaining strength of mission on both sides of it. The California model is not necessarily the only one to follow, but at least it is one where the maintenance of quality is tied to the maintenance of legitimacy, however much beleaguered from time to time (as at present). The maintenance of legitimacy within an Israeli setting is an issue that I think we should discuss, as it depends upon the social character and culture of the society, its valuations of prestige, feelings of superiority or inferiority, canons of social acceptance and the prior experiences and culture of immigrant groups. The legitimacy issue is also related to the question of tradition, that

body of codes and rules, unspoken as well as spoken, that links the research university to its illustrious predecessors and allows for a commitment to self-regulation and corporate governance – I,e., the "guild" inheritance.

The problem of differentiation also raises the question of whether Israeli universities (or colleges) should vigorously compete against one another for resources. This is a difficult question because most of the funding comes from one source and the system of taxation does not allow for too much discretionary spending. In this respect Israel is closer to the mainstream of European universities than to American solutions, which derive from a history of individual rights, a philosophy of economic self-interest and a consumer-demand base.

The socialist foundations of much of Israeli culture has, as noted in our readings, produced a situation where collective identify in the form of academic unions, for example, is more important than individual bargaining possibilities. There is indeed a nice feeling about a salary policy that is essentially egalitarian. Competition makes many academics uneasy. In addition, we all can cite anecdotal evidence where the rewards are maldistributed, or appear to be in violation of inherited academic ethics. Yet the competition for talent is one way of maintaining or acquiring quality. I think that a reasonably effective reward structure is one that provides a number of different rewards or forms of approval and recognition, so that salary differentials are not the only means of distributing honors. We can discuss this.

I am a bit uncertain as to the sources of prestige in Israeli society, except that the German idea of the research university has prevailed in the higher education sector. Attention really needs to be given to the issue of how to recognize and reward those academics who are not primarily researchers but have a deep commitment to classroom teaching and vocational training. Perhaps the colleges sub-committee will have some suggestions. This is now a widespread matter. Sweden has become interested in teaching and a proper reward system for it. What must be avoided, I believe, is the creation of a two-class system within a single university (the question is raised in our readings) composed of researchers on the one hand and teachers on the other. First, I do believe in the principle that good teaching in a research university depends upon personal involvement in research (we can talk about the issue of boring teaching in another place). And second, I have seen the two-class system at work in Swedish universities of the 1980s when colleges of education were integrated into research universities. The results in terms of self-esteem were devastating. Rather, institutions need to be differentiated according to mission, with status mechanisms developed that reflect that mission.

Let me add a few words about internal governance and corporate self-governing, the academic model inherited from the middle ages but much compromised in practice. States have taken command of higher education systems, varying their policies so that at some points a considerable amount of institutional autonomy exists, but at another withheld. Plural pressures, polyarchy and definitions of national interest have made the research university extremely vulnerable to outside but also inside pressure (as in the case of student demonstrations or divided academic opinion). Hence in Europe the tendency

has been to strengthen central administration in order to unify the institution's response and provide central guidance. While many academics resent this increased authority, deriding it as "management" and "bureaucracy" (which it can be), others welcome it as the best means for preserving academic energy for teaching, research and public service.

Except for the Technion, Israel's universities have a duarchy composed of a president and a rector. This is perhaps not quite as unique as our readings suggest. Some British universities have experienced conflicts between the Vice-Chancellor and the Registrar, and Oslo University in Norway has some kind of division between an academic rector and a staff director, with, as far as I can tell, confusion as to the powers of each. I also notice the growth throughout the European universities of non-academic staff who appear to be assuming a greater role in appointments to chairs and other vital professorial interests. I am not sure whether this is by default or design.

I cannot see how academic control of an institution can be maintained with this kind of division and separate channels of accountability. The large non-academic staffs that typify research universities are divided in their loyalties and uncertain of their reporting lines. If our committee makes any recommendations along these lines, I hope that they will be in support of unitary leadership, with ample provision for consultation and, where relevant, shared governance with a Senate or some other internal body, perhaps representative. (I need to learn more about the Senate structure in Israeli universities.)

The organization of knowledge within universities has undergone change throughout the ages. First were the Faculties of the medieval university, divided according to liberal arts and professional studies. Shortly thereafter colleges were affiliated with universities. "Nations" or corporate bodies of students from various countries or provinces also comprised an administrative layer of separate teaching institutions. Later came laboratories and the German chair system of institutes and seminars. Finally we have the departmental system, well exemplified in the US, and perhaps now the dominant system everywhere, if combined in many countries with some kind of system of Faculties. I am not sure how to describe the division of responsibility or authority between Faculty and Department, but I sense the relationship is undergoing continuous adjustment.

What is the optimal organization for the generation and dissemination of knowledge? Essentially I agree with the position taken in our readings. The department still has primacy in the training of research talent and in the maintenance of teaching. Departments have a history, a tradition, a corporate sense built around a shared discipline. Where the discipline is no longer fully shared, the department divides (at Berkeley the Department of Psychology is actually divided into three separate units). I think the department is still necessary, but it is also true that provision needs to be made for those fields that are developing outside traditional disciplinary boundaries. Hence new units have arisen everywhere in the university world based on subjects rather than disciplines. The advantage of such units are in fact that they provide another means for academics to align their interests and curiosity with new initiatives. (They also bring in outside money, which is a mixed blessing.) The disadvantage is that they weaken departments by draining off talent. They also increase the burdens on participating academics, since

belonging to more than one unit invariably adds to work loads. It also leads to the expansion of non-academic staffs, increasing the size of a labor force within universities that may not have the same sense of corporate loyalty since they lack the requisite freedom to define their tasks. The interdisciplary units also increase the size of a research staff that does not have security of tenure or is not represented in Senate government, in short, does not have the same status as professorial appointments.

These are knotty problems, and I am not sure how to resolve them. I do think that a dual knowledge structure is very useful in today's world, the more or less permanent department and the more or less impermanent interdisciplinary unit that can be abolished when an argument for its continuation is no longer convincingly made.

I also think that the overall reward structure of the research university is in serious need of attention. More and more work is undertaken on the model of the scientific team, where the honors are shared. This can be reduced to absurdity, as when numerous names appear on a given document or report of research results. The system of internal peer review essentially rests on an evaluation of individual effort, assuredly so in most humanities and social science fields. How to recognize teamwork, cooperation and combined intellectual activity while preserving some canons of originality and creativity in order to stimulate those qualities so essential to the university is not an issue that I have resolved in my own mind.

My penultimate remarks are in the form of a commentary on your own reflections regarding the role of science and technology in human affairs. I certainly agree that historically technological innovation has been an engine of profound change. The engineering profession today may well be the key profession of this century. Yet I urge a certain caution. Technology also creates problems, depending upon the rapidity of change. Environmental and health concerns, disparities in wealth, distortions in labor markets are some of the attendant difficulties. In other words, technical innovation sometimes introduces problems that technology must then resolve.

We must also recognize — again I am commenting on your own reflections — that a rational, scientific understanding of the world is not the only means by which people past and present make sense of their existential situation. I would not downplay the role of religion for example. There are also many kinds of rational systems — medieval culture, for example — and of course many that are irrational but provide satisfactions. Perhaps the profoundest problem facing modern society is identifying cultures and institutions that provide an array of social meanings other than those categorized as "scientific." The Zionist dream that a university would supply a source of cultural meaning for Israel must have included broader dimensions.

These are just a few preliminary reflections on the texts that we have been sent. There are many more issues to be discussed raised in those texts. But to this point I only want to give some reassurance from my perspective that the formulation of the problems is indeed on the right track.

## **Working and Position Papers**

- Tadmor, Z., "The Golden Age of The Scientific Technological Research University", University Education and Human Resources Series, May 2003.
- 2. Ben Zvi, N., Kochva, E., Tzahor, Z., "Rethinking Higher Education in Israel". University Education and Human Resources Series, May 2003.
- 3. Trow, M., "On Mass Higher Education and Institutional Diversity", University Education and Human Resources Series, May 2003.
- 4. Tadmor, Z., "The Triad Research University Model or a Post 20<sup>th</sup> Century Research University Model", University Education and Human Resources Series, May 2003.
- 5. Rothblatt, S., "Preliminary Reflections on Knotty Issues", University Education and Human Resources Series, July 2003.