



- ◆ Trabajo realizado por la Biblioteca Digital de la Universidad CEU-San Pablo
- ◆ Me comprometo a utilizar esta copia privada sin finalidad lucrativa, para fines de investigación y docencia, de acuerdo con el art. 37 de la M.T.R.L.P.I. (Modificación del Texto Refundido de la Ley de Propiedad Intelectual del 7 julio del 2006)

monoamines by a fluorescence method". *Acta physiologica Scandinavia*. 56-91. 1962.

3.º FALCK, B.; HILLARP, N. A.; THIE-ME, G. and TORP, A.—"Fluorescence of catecholamines and related compounds condensed with formaldehyde" *Journal of Histochemistry and Cytochemistry*. 10.348-354. 1962.

4.º FUXE, K.; HÖKFELT, T. y UNGERSTEDT, U.—"Localization of monoamines in the central nervous system". "En Monoamines, noyaux gris centraux et syndrome de Parkinson". Masson. Paris, 1971.

5.º MOOTZ, W, y MUSEBECK. "Demostración de las catecolaminas mediante

la microscopia fluorescente". *Informaciones Leitz para la Ciencia y la Técnica*. IV 247-249. 1969.

6.º PARENT, A.—"Demonstration of a catecholaminergic pathway from the midbrain to the strio-amygdaloid complex in the turtle" - *Journal of Anatomy* 114. 379 - 387. 1973.

7.º SARNAT, H. B.—"Occurrence of fluorescent granules in the Purkinje cells of the cerebellum" - *Anatomical Record*. 162. 25-32. 1968.

8.º YAMAUCHI, J. D. y KEMP, K. W.—"Catecholamine loading and depletion in the rat superior cervical ganglion" - *Journal of Anatomy*. 114 271 - 282. 1973.

THE UNIVERSITY AND THE DEVELOPMENT OF CRITICAL CAPACITY AND PERSONAL FREEDOM ⁽¹⁾

By AQUILINO M. POLAINO LORENTE

Profesor of Clinical Psychology University of Córdoba. Spain

UNIVERSITY AND SOCIETY

1. In analysing the present university situation we find that we are faced with a variety of questions and problems, some with a direct bearing on the University itself, others on its relation with society. The University's social and cultural possibilities give it a crucial place in social development.

2. University problems are vast and complex. The causes are undoubtedly numerous. One of them is probably the development and diversification of knowledge, which is growing continually. In the field of positive and social sciences new work-techniques and areas of study are constantly being discovered, opening new horizons to investigation. This process is especially evident in the University, and conditions its evolution. In the living organism a double process of diversification and integration is to be

found in growth. In a certain sense, the process in the social organism follows a similar course, the difference being that it is not governed by physical laws, but must be consciously guided. In the University the law of diversification inherent in all growth holds true; but it would seem necessary to stimulate the process of unification, in order to avoid the University developing into what has been called *multiversity* —a knowledge complex with no unity. The University must continue in the search for new ways to maintain an integration of knowledge, bearing in mind that society also needs the development and diversification of the sciences.

3. Another cause of present Universi-

(1) Comunicación al 8.º Congreso Internacional de Neuropsiquiatría Infantil. Filadelfia (USA), julio-agosto, 1974.



FIGURA 5

BIRCH-ANDERSEN (1962) los interpretaron como gránulos de lipofucsina y SARNAT (1968) los tipifica en relación con la edad, siendo escasos o nulos en los animales jóvenes y más abundantes a medida que la edad avanza hasta llegar a un punto en que su número e intensidad permanece constante.

BIBLIOGRAFIA

1.º) BJERRE, B.—“The production of catecholamine-containing cells in vitro by young chick embryos studied by the histochemical fluorescence method. *Journal of Anatomy*. 115. 119-131. 1973.

2.º) FALCK, B.—“Observations on the possibilities of the cellular localization of

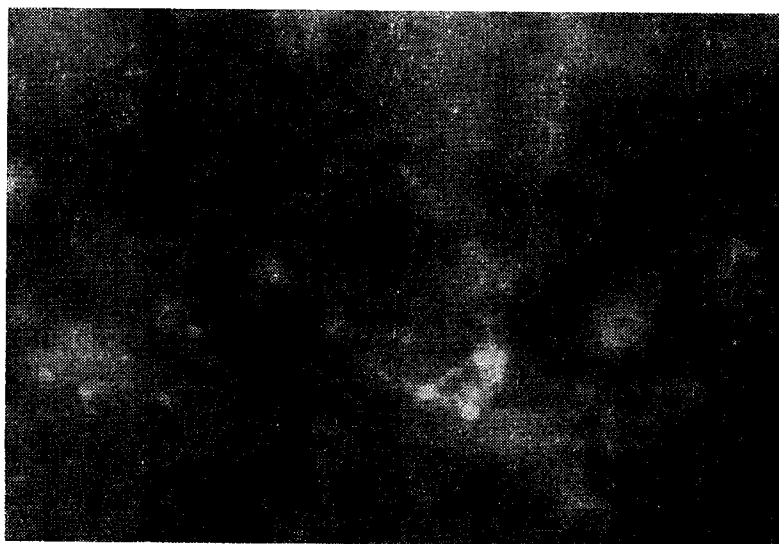


FIGURA 6

ty problems is the relationship between the University and society. The University cannot be alien to the needs and problems of the society of which it is a part. As well as being difficult to justify theoretically, it is nothing less than utopic to consider the University as an "island of knowledge", uncommitted to any social demands, and absorbed in the task of creating science. In theory the University could exist in isolated seclusion, concerning itself only with the growth of knowledge, but this as an ideal is scarcely viable: it overlooks an essential aspect of the University, that of service to society.

4. It is a fact that the University and each of the individuals constituting it reach their fulfilment in the world of ideas and changing reality. In the University itself and in the problems, interests and way of thinking of those forming it, society is present. Not alone is each University set up in a particular society, but the internal dynamics of that society is what alimnts it. It can therefore answer the doubts and questions posed by that society.

5. The relations between society and the University should not be described in terms of two realities foreign to each other. The University itself lives the same life, and experiences the same problems, as society. However the way of doing so is different in each case. The University plays an increasingly important part in detecting the problems of the society to whichit belongs. It does not get caught up in these problems, but rather fulfils, or can fulfil, a critical function. It is particularly equipped to individuate and delimit problems, and to try to solve them in a positive way.

6. The crisis of today's society on an ideological, moral and cultural level is therefore evident in the University, indeed the crisis is more radical and can be seen more clearly than in other sectors of society in such things as: rejection of consumer society's values, rebe-

llion against authority, reluctance to accept valid criteria or moral examples, confusion between authenticity and instinctiveness.

7. The University is equipped to diagnose the "evils of the century". The question remains whether it is equally equipped to carry out a therapeutic function.

8. The University can offer a type of remedy which we could call "opportunity". Does a particular branch of industry lack technicians? Whitt some foresight the University can prepare the required personnel. An excessive number of graduates registers in one particular Faculty or School? Matriculation can be limited. Without going into the question of the legitimacy of such remedies, what is important is to recognise how limited their scope is. More profound aspects of man's life are affected by the state of crisis we have just been considering. That the University solve problems of a technical nature is important, but only relatively so. One symptom of this is that university unrest is greater in those countries where socio-economic problems have been solved.

9. An urgent task for the University is to help society to clarify its ideological and moral problems. This means that the University must present its students with a real opportunity to form mental attitudes which permit a serious and positive confrontation of such problems.

10. Among these mental attitudes are to be found a *critical capacity* and the *meaning of personal freedom*. The University can offer an appropriate environment to develop a critical capacity as a means of integrating knowledge on a personal level into a unified system. In promoting a critical attitude—a guarantee of the necessary intellectual basis to exercise freedom in a proper way—the University at the same time can present opportunities to choose and to commit oneself personally and responsibly.

UNIVERSITY EDUCATION AND DEVELOPMENT OF A CRITICAL CAPACITY

11. The first supposition basic to a critical capacity is to admit that reality can be known by the human understanding. This fundamental truth is seldom debated today. Discussion on the scope of knowledge is thought to be proper only to the University of other centuries. This lack of concern does not mean that there is widespread recognition of the capacity of the intellect to know the truth, rather it means that a new form of scepticism is widespread.

12. The sceptics of today make no attempt to question the truth of the senses or the authority of reason. They are men bent on the interminable search for truth, with no desire of finding it. Scepticism has "developed" from doubting the ability of reason to know, to doubting about the rational acceptance of a truth which transcends man. Knowledge ceases to be an encounter with truth and becomes a labyrinthine search for new ideas. For some, knowing becomes thinking, creating new ideas, new theories. An analysis of the theory of the sciences or of some of the present —day philosophy will show that they no longer tend to be concerned with a deeper understanding of reality through the study of what is knowable —the discovery and consequent acceptance of a truth which has been ascertained— but rather the intellectual construction of a theory which has some application to the controlling of the material world, or to the guidance of society.

13. Accepting the knowability of the real implies two things: grasping the possibilities of the human understanding, and the existence of a reality that transcends it. Understanding is not closed in on itself: it goes beyond itself in order to be in contact with reality, in an attempt to grasp it and make it its own. But given its infinite ontological richness, reality cannot be apprehended

in one single omni-comprehensive glance of the understanding. This is the origin of the great variety of possibilities aspects, opinions and sciences. This pluralism is therefore rooted not in the creative activity of the human understanding, but in the ontological richness of reality. The very diversity of viewpoints, problems and solutions to the same reality are due to its inexhaustible, and yet comprehensible nature. In addition man interferes, modifies, creates and enriches some aspects of reality.

14. If the transcendence of the real is not accepted, truth is reduced to a mere logical coherence of thought with itself, and could therefore remain enclosed within each ideological system. The unity of truth is destroyed and its fragments are isolated attempts at mental construction, the only foundation for which is their internal coherence. Getting nearer to a phase of true progress, of knowing the real more and more completely would not be possible. Once the transcendent meaning of the real is lost, a disorderly proliferation of tendencies, opinions, doctrines and theories follows, and with it a tolerant attitude, which is adopted as a minimum requisite for peaceful co-existence in the midst of such an intellectually chaotic pluralism.

15. When there is no room for truth in the fullest sense, neither is there room for error. If thought cannot be related to transcendent reality a logical coherence is all that can be demanded: being true to itself. Anything that can be justified coherently within the system would then be considered as truth.

16. Does any coherent criterion exist within this theory? Taking the above suppositions into account, a variety of answers could be given, but one stands out rather specially: the useful. The validity of a truth would be judged by the degree of usefulness *to me* and *to society*. Error, what should be rejected, is the useless, that is to say whatever of-

fers no social benefits, and whatever requires the understanding to go beyond itself and adopt a specific line of behaviour, an anchor beyond its own subjectivity.

17. With such notions of truth and error, there would be no possibility of speaking about the formation of a critical capacity. Etymologically criticism means judgement, and to judge means comparison with a good or a truth; but such a mental activity becomes impossible if there is no basis for evaluation and no firm standpoint. With no objective truth and error, only one alternative remains: to compare the different mental constructions, the ideological systems, or destroy them in the name of one's own system.

18. We find two attitudes today which correspond to these two possibilities: a *neutral conformity*, accepting everything in the name of the ideal liberty or universal understanding, or *anti-conformism*, continually in search of a new solution, with the systematic rejection of all systems.

19. To form critical capacity the existence and knowability of reality are necessary suppositions, but they are not sufficient in themselves; since reaching truth is the ultimate objective of true criticism, desire to seek truth is also essential. Meaningfulness depends on truth, while at the same time truth is the driving force for critical capacity.

20. But just because truth in itself is objective not all judgements on reality have the same characteristics. It is important to realise this, as one of the main effects of having a critical capacity is the ability to distinguish certainty from mere opinion. The truth of reality is *there*, but in facing it the understanding does not always adopt the same approach. This happens for two reasons: due to the nature of the object and the limits of human understanding. The ability to distinguish what is certain from

what cannot be the object of certainty—free future events—is proper to a critical capacity. Even within what could be objectively certain, a critical capacity leads us to distinguish between the truths that can be affirmed with greater certainty, truths revealed by God, and believed thanks to the virtue of faith, and truths of a metaphysical nature.

21. In the positive sciences a critical capacity implies having an open mind in regard to the analysis of what has already been achieved, in order to obtain a more comprehensive knowledge. If in scientific investigation results always fall within the sphere of probability, what would be attempted is to close the gap between probability and certainty, in so far as possible.

22. Regarding future free events a critical capacity will ensure, above all, that nothing which of its very nature lies within the sphere of opinion, is taken as certain truth. This happens, for example, in solving political problems, where no true solution can be judged with certainty in an absolute sense. This means the rejection by critical capacity of any attempt at imposing as the only valid solution one which will always be contingent in itself.

23. A genuine attitude of searching for truth, and the ability to assume a correct position regarding the different realities one attempts to know, is therefore something we expect within a critical capacity. Critical capacity implies the ability to integrate new truths in a personal and constructive way, and therefore to help to form it should be one of the objectives of the University.

24. The concept of the University as an institution equipped to *transmit* culture is a poor means of expressing its function, which would thus be reduced to the transmission of fossilised cultural products. If a definition in terms of culture must be given, the University as a

creator of culture is more fitting; and this not only with regard to its role in research, but also in the creation of culture in a more direct and live sense, by stimulating personal culture among its students.

25. With the present development of sciences only a small area or specialised field can be encompassed by the individual, while other aspects of knowledge, or other sciences, are outside his reach. An over-all view, permitting categorical affirmations on cultural, social, even scientific problems, is difficult today. At the same time it is more important than ever not to follow blindly the majority opinion, no matter how statistically "normal" it may be.

26. The function of the University is to give not an encyclopedic knowledge, but, through the means proper to it - lectures, study-groups, seminars, etc. - a formation in critical capacity which accepts no cultural information without a previous critical analysis of its validity. An instinctively felt affinity, or the fact of widespread acceptance, are not the reasons why some data is incorporated, but rather that its truth has been ascertained - independent of how many support it.

27. Critical capacity establishes truth as a reference point. Acceptance, rejection, or disagreement in regard to all further data received depends on the truth in them, independent of their proposers, or where they have originated. To achieve this habit is an important aspect of intellectual formation.

28. The University encloses in itself a great diversity of disciplines and knowledge, and an inexhaustible variety of values, opinions and methods. This is shown in the variety of faculties, departments, schools and other institutions which make up the University, and also in its openness to all the cultural values of the society to which it belongs. All these peculiarities of the

University Allow each student to find an adequate environment to develop a critical capacity. But if the University is to offer these opportunities effectively, it must contribute in constructing the personal culture of each student, and not confine itself to displaying the whole gamut of knowledge, disciplines and scientific methods, as one might do in a museum of human understanding. If the University were to limit itself to investigation and teaching in the narrow sense, giving a more or less complete vision of the positive sciences, it would lose one of the most genuine characteristics of the University; that of being a creator of culture and not a mere transmitter.

29. If the University is to further development of critical capacity free choice in the intellectual field must be made possible, and to do so criterion must be given if this exercise is to be correct. This criterion can be none other than objective and transcendent truth which must both help the individual towards personal commitment and free self-determination, and be an anchor for cultural pluralism. For this reason when the University guides towards truth, there is no infringement of freedom. To form critical capacity and at the same time facilitate a free self-determination, such guidance is indispensable.

CRITICAL CAPACITY AND THE USE OF FREEDOM IN UNIVERSITY FORMATION

30. Not all human actions are free since many actions are conditioned by biological and social factors which the subject cannot control. But it is also true that every man experiences in an immediate and intimate manner the ability to act freely, and this is precisely what matters in responsible action. The fundamental condition in developing personal freedom is the capacity to face

up to one's own limitations and possibilities and to be aware of the responsibility implied in free action and the urgent need therefore to establish a solid intellectual basis for this action. If self-determination must be achieved to do what is best in each case, we must first acquire a critical and objective knowledge of the data, in order to ensure a correct choice.

31. The need to establish a solid intellectual basis to free action has particular importance in our culture. In the daily life of any individual an innumerable variety of situations arise, and a much greater variety of opportunities are offered than would have been thought possible a century ago. In personal development and cultural areas this range of openings could stifle choice unless one has a critical capacity, or the habit of making decisions personally.

32. Making decisions, the difficulty inherent in choice, can give rise to who attitudes. The first is an indifferent attitude, staying on the fringe of what happens in society, which readily gives way to a generic rebellion against society itself. The second is that of giving in to continual change, to current opinion, the attraction of what is new; it implies constant flux, and in appearance it can seem to constitute useful experience, which is easily mistaken for freedom. The following sequence of thought the result of such an attitude: if to be fixed in a given position is to lack freedom, then in some way taking a definite decision means crystallising human action in a rigid way and hindering the dynamics of progress. The choice of non-choice is then made, and the commitment of non-commitment. But not to commit oneself, and to try to guarantee the possibility of always being in a position to choose, is to give up the use of freedom.

33. Freedom is indetermination in so far as the person is not determined by external forces but it is also determination as well, because any free action implies a choice based on the judgement of the person.

34. Not taking decisions is often mistaken for freedom and self-determination. In a world offering so many possibilities and options, if choice is not guided by the gift of critical capacity it is much easier to *collect experiences*; but this, if it becomes a habit, stifles the exercise of self-determination.

35. An authentic choice depends on the value judgements formed by a critical capacity this avoids the person being a slave to the cultural environment, to prejudices or to traditions which are not justifiable in themselves. The University must therefore give the material basis for freedom of choice at a cultural and scientific level, and in personal achievement. And to do so, it must provide the facilities necessary for making a good choice.

36. Once a choice is made which is based on a critical study and objective knowledge of the data, man takes on a personal commitment and freely orientates his actions towards an end, an objective. The number and quality of the decisions made, once they are caused by the will - as agent and the good - as the object of the action - develop man's freedom. Freedom is developed too while carrying out the corresponding decisions, taken freely. After a decision is made, freedom is then exercised in directing all abilities and actions towards this objective, which has been freely chosen. The true and deep dimension of freedom is not to be found in passivity or in constant change, but in voluntary decision, being faithful to one's own way of being, to the end for which one has freely opted.

37. If the University is to contribute effectively to developing the critical ca-

capacity in everyone who works there, professors and students alike, academic life must develop precisely along lines guiding University activities towards personal culture, equipping the people it forms to solve the problems arising in society, with each one contributing in his particular field.

38. To do this, the University must be autonomous, in other words, it must have freedom and the power to fulfill its task without being subject to pressures which lead to compromise solutions. Autonomy in reference to other sectors of society means independence; in the internal dynamics of the University institution it means all concerned in the University intervene in the common task. Active participation in University life is an ideal and right of all in the institution. If this participation is to be responsible intellectual maturity, and critical capacity is required in each member.

39. To sum up we can say that to fulfill its function properly in today's society the University must see that

real opportunities of developing critical capacity and personal freedom are offered to those working there. A lack of critical capacity in taking a definite stand on real situations impedes all unified assimilation of culture and leads to incoherent personal behaviour. It leads to noncommitment, and escape from all definite attitudes to truth and error. This absence of commitment gives a false sense of freedom, which is then understood and lived as liberation from all duty, all commitment, and tends to be expressed in instinctive and primitive behaviour.

40. The University can make a very effective contribution to society's problems through forming people in a critical capacity, equipping them to integrate culture personally and to make right decisions. Critical capacity will make possible a true exercise of freedom as choice and decision. For this reason the University should offer all concerned in the University not only access to knowledge, but the guidance which helps them to choose rightly with freedom, and by themselves.

LABORATORIO de los Dres. GOYANES. CITOGENETICA

REALIZACION DE CARIOTIPOS.

Plaza de María Pita, 12

Teléfono 223439

LA CORUNA

Aprobado por la Comisión Provincial de Censura Sanitaria con el núm. 624.

INSTITUTO DE RADIOLOGIA MEDICA

Dr. URIEL

**Fernández Latorre 1.
RADIODIAGNOSTICO
RADIOTERAPIA**

Teléfonos: 232719 y 223231

LA CORUNA