



## Observations conclusives dans une optique prospective

ANTONIO GUERCI

Département de Sciences Anthropologiques et Musée d'Ethnomédecine «A. Scarpa», Université de Gênes, Italie

Je tenterai de mettre en évidence les éléments les plus significatifs qui ressortent des journées de ce cinquième Colloque européen d'Ethnopharmacologie et d'en résumer les projets fondamentaux, dans une optique prospective compte tenu de mon expérience d'anthropologue, de ma sensibilité de responsable du Musée d'Ethnomédecine de l'Université de Gênes et de ma curiosité de chercheur.

J'ai focalisé trois objectifs prioritaires qui, à juste titre, préoccupent les organisateurs.

Le premier objectif est une invitation à éviter de penser que la science est un produit social et culturel singulier, propre à la culture occidentale : il s'agirait d'une grave erreur.

Le second est la nécessité de proposer de nouvelles voies au rapport dialectique savoirs indigènes/savoirs scientifiques, sous-jacentes toujours au concept fondamental de métissage.

Le troisième inciter un dialogue indispensable entre les différentes disciplines afin d'éviter les « pièges » réductionnistes, qui peuvent créer seulement des atteintes à l'ethnopharmacologie.

J'interviendrai tout d'abord sur les deux derniers objectifs, pour terminer avec le premier.

Au cours de ces dernières années on a assisté à deux événements importants qui sont en mesure de soutenir la recherche en ethnomédecine et en ethnopharmacologie.

En premier il y a eu la formulation et la signature de la Charte des Peuples pour la Santé de la part de l'Assemblée qui s'est réunie à Savar au Bangladesh (1998) et qui est constituée par des organisations internationales (surtout des pays pauvres), des mouvements de la société civile, des ONG, de nombreux groupes de femmes. Le but de cette Assemblée est aussi celui de créer une plate-forme parallèle, en opposition aux orientations actuelles de l'Assemblée Mondiale de la Santé, pour relancer les contenus de la Déclaration de Alma Ata (1978), de plus en plus négligés. Il s'agit de nouveaux défis économiques, politiques, sociaux, environnementaux dont l'objectif est de réorienter la santé vers la personne.

Puis la Déclaration universelle de l'UNESCO sur la diversité culturelle, adoptée par la 31<sup>ème</sup> session de la Conférence Générale de l'UNESCO, à Paris, le 2 novembre 2001.

Les contenus de cette Déclaration impliquaient entre autres les savoirs médicaux locaux, en tant qu'expressions et manifestations de différentes cultures.

Elle prône qu'il faut ériger la diversité culturelle au rang de patrimoine commun de l'humanité; une diversité culturelle qui ne doit pas être perçue comme un patrimoine figé, mais comme un processus dynamique et métissé, garant de la survie de l'humanité.

Source d'échanges, d'innovation et de créativité, la diversité culturelle est, pour le genre humain, aussi nécessaire que la biodiversité l'est dans l'ordre du vivant (Art. 1).

Le pluralisme culturel constitue la réponse politique au fait de la diversité culturelle (Art. 2).

La diversité culturelle élargit les possibilités de choix offertes à chacun ; elle est l'une des sources du développement (Art. 3) économique, intellectuel, moral, sanitaire.

Le quatorzième objectif des Etats membres est de respecter et protéger les savoirs traditionnels, notamment ceux des peuples autochtones ; reconnaître l'apport des connaissances traditionnelles, particulièrement en matière de protection de l'environnement et de gestion des ressources naturelles et favoriser des synergies entre la science moderne et les savoirs locaux.

S'agit-il de déclarations de bonnes intentions qui resteront lettre morte?

Les derniers événements d'Afrique du Sud, de Costa Rica, des Iles Samoa, d'Inde, d'Amazonie, des Boscimans San, témoignent que la sensibilité pour ces problématiques a atteint un tel « point critique » que toutes ces solutions ne peuvent plus être différées.

De ce Colloque des hypothèses et des axes de recherche ressortent qui méritent d'ultérieures explorations.

Je reviens au premier objectif de cette rencontre : l'invitation à ne pas commettre l'erreur de considérer la science comme un « produit » de l'Occident. Pour les anthropologues c'est un axiome. Mais à ce point, il est nécessaire d'éclaircir qu'est-ce qui est scientifique et qu'est-ce qui est rationnel.

On se rendrait compte alors combien peu de science, mais combien de rationalité se cache dans la plupart des pratiques thérapeutiques traditionnelles.

Nous pensons que, mis à part la progression des travaux d'ethnobotanique, de phytothérapie, donc de phytochimie avec les applications directes sur le territoire et dans l'industrie, les travaux relatifs aux anatomies et aux physiologies culturelles mériteraient d'être approfondies.

Nous avons en effet constaté que les recherches portent principalement sur l'identification de la plante, sur ses principes actifs, sur les représentations des maladies, sur les nosographies populaires, mais qu'aucune étude ne prend en compte la croisée des chemins, à savoir la conception traditionnelle de l'action de la plante médicinale (ou du remède en général) sur l'être vivant (J.P. Nicolas).



Nous sommes persuadés que l'action culturellement perçue, ou la représentation de l'action, du médicament est directement corrélée au médicament employé, dans toutes les cultures, celle occidentale incluse. La prise d'un médicament est sans aucun doute un moment d'interaction entre biologie et culture. Le médicament est prévention, est soin et cause de maladie en même temps. Le médicament implique des aspects biologiques, chimiques, évolutifs, physiologiques, pathologiques, curatifs, préventifs, psychologiques, comportementaux, socioculturels, historiques. Prendre un médicament c'est se guérir, continuer à vivre selon la mémoire, imaginer son propre corps en action, percevoir ses propres organes en fonction, découvrir et interpréter les nécessités biologiques et culturelles contingentes qui émergent du bruit de fond chimico-métabolique. Néanmoins prendre un médicament c'est aussi risquer de se donner la mort, de s'empoisonner, de se détruire et, dans le mystérieux mécanisme de l'assimilation, assumer la responsabilité énorme de la transformation, dans le plus profond des organes, du propre corps ; actes reliés à la structuration symbolique de l'univers et du milieu.

Aussi une analyse attentive des langages médicaux, des lieux de convergence de la médecine, de la pharmacologie et de l'anthropologie, des modalités de prise des médicaments, des caractéristiques de l'emballage et des notices, de l'effet placebo, de la subtile convergence (particulièrement en Occident) entre médicament et cosmétique, jusqu'aux médicaments de nouvelle génération pourrait éclairer, et favoriser, l'action et le sens du principe actif.

Néanmoins un médicament sans un thérapeute qui l'ordonne, est très peu significatif.

Se demander ce que signifie de faire le thérapeute dans l'ère de la «génomique» suppose avant tout de savoir que le génome représente un spectre de possibilités et de limites individuelles, dont l'exploration se fait au travers d'expériences sociales et culturelles qui renforcent l'unicité de la personne.

La nature humaine réside dans la diversité et dans les imperfections des systèmes physiologiques qui échangent de la matière et de l'énergie, qui peuvent être intacts ou mal fonctionnants et qui s'adaptent comme ils le peuvent aux modifications du milieu.

Un nouveau sens philosophique, qui soit en même temps naturalistico-évolutif et historico-culturel, pourrait sans aucun doute inspirer au mieux les objectifs pédagogiques de la future formation médicale occidentale et de la communication scientifique. Et si on y regarde bien il s'agit de bases philosophiques qui ont toujours accompagné les savoirs médicaux traditionnels.



## Conclusions and perspectives

EKKEHARD SCHRÖDER

AGEM (Arbeitsgemeinschaft Ethnomedizin). Editor of Curare

My actual points at the end of this colloquium are more selective and personal, not yet representative for evaluation standards. My profession is physician, I am working as psychiatrist in my own cabinet in a multicultural quarter of a big German town. So I am interested in the matters treated here, new informations on drugs, but also in any research on the interaction between healers and their clients/patients. Scientific research should serve to find good ways of interactions concerning the last mentioned.

The European Society of Ethnopharmacology put out a practical accent of interest, but also a humanitarian one: Research follows the way from the study of indigenous to scientific knowledge and brings back the findings to the field. The different medicines in the world represent an immense pool of information based on long term observations. This field has of course a philosophical background. In a wider sense it means the specific universe of everybody: the Lebenswelt, as the philosophical term is called. The goal is to create better quality of life. To do so makes it necessary to work in different dimensions which belong together.

1) Diagnostic pathways: these are scientific identifications of disease and drugs and i.e. effects of molecules nowadays, but also looking i.e. at the self diagnostic patterns by ethnological and sociological studies, as the pharmacist and chemist Bernard Weniger pointed out here during the days.

2) Therapeutical itineraries: that means healer/patient-interactions, therapy managing systems, re-evaluation of receipts of any provenience, self-diagnosis pathways and so on. We learned here from ethnopharmacological research on hypertension i.e. on the plant *Ceprocia glazioni* SMETH by Teresa Christina Monteiro. This is a concept of physician, patient and his community, an ethno-concept, which uses the vocabulary of biomedicine but covers other symptoms than those of biomedicine when speaking of hypertension.

3) A historical dimension: So the Institute for the History of Science and Documentation here is asking what history contributes to create a fruitful process of study. It is good to be remembered on the different ways of thinking of Linnaeus and Buffon, as Pyenson did here - and you surely can add lots of representants of the „indigenous knowlegde“ at this place. Important is that such work does not only intend a remembering but should inspire a re-thinking of the matters. In this sense Guy Mazars, the president of ESE, send us his message...“Des théories savantes ont pu systématiser des pratiques populaires. A l'inverse, des pratiques populaires peuvent résulter d'une diffusion, d'une vulgarisation de doctrines savantes...”

4) Ethical dimension: So Jacques Fleurentin remembered here the Conventions of Washington and Rio de Janeiro and the importance of maintenance of biodiversity of flora and fauna and the implications to create sustainable development.

5) Back to the Field: in its broader sense of meaning and even uprising challenges. Here lots of key-words have to be mentioned: national identification as Armando Caceres from Guatemala showed by presenting the pharmaceutical product “Mayaderm” to us, or better qualities of life, realisation of human rights on earth, security of life, handling of legal power. The field is also the field at home as elsewhere. The way of initiation of a new drug by proving effects and testing the efficacy of even a single molecule and the “guardian” or “priest” who gives the guarantee of quality of this complex process. This dimension shows very well that the other dimensions are necessary for a real “back to the field”, here specially the ethic dimension, see point 4, which leads to critical reflection of the own doing.

Security is important. Therefore the way of the initiation of a new drug is such a complicated procedure. The guardians of this initiation are here in this room, giving these guarantees, because it is a question even of life and death, wellbeing, healing or of the contrary! The standards of security must be as high as in aviation, another important institution of our world today, and you know, in aviation one drop only almost always kills.

So we had three days of discussion, reflection and leisure in a botanical garden similar to Cicero at Tusculum, where he wrote his meditations, and all this we could have with the vis a tergo by the Institute of the History of Science and Documentation at Valencia. Thank you to the organisers, specially to Prof. José Luis Fresquet Febrer and Prof. Carla P. Aguirre Marco.



## 5<sup>th</sup> European Colloquium of Ethnopharmacology: Conclusions and perspectives

FJ MORALES-OLIVAS

Department of Pharmacology. Universitat de València

First of all I would like to thank the Organizing Committee, by its invitation to participate in this 5th European Colloquium of Ethnopharmacology. It is the first time that I attend a meeting on Ethnopharmacology although I knew the discipline, mainly by the proceedings of the previous meetings of this Society. It has been very interesting for me the way in which experts from the diverse branches of the natural and social sciences are able to use a common language to obtain a multidisciplinary view of the subject. It is also remarkable the respect to the interculturality shown along the sessions of this colloquium and this is very important because the contact among different cultures is now usual. Western world and developed countries are not the owner of science. The generic title of the colloquium: Cultural interbreeding in Ethnopharmacology is really opportune.

Aspects related to the medicinal plants have been mentioned frequently in the Colloquium. There are some matters that attracted especially my attention:

- The possibility of loss of information and of knowledge on natural remedies as a result of a deficient broadcast among generations. The question is relevant, above all, if this lack of information, as mentioned in the colloquium, is connected with a decrease in the valuation of the traditional uses. It would be necessary to carry out educational actions for the general public to recover the interest for these matters. The role of primary school can be very important.

- The legal difficulties to obtain agreements on the regulation of the medicinal plants. The development of medicinal plants as therapeutically alternative could be put into danger by a very strict regulation criteria to obtain administrative authorization; moreover this situation could take to unsafe use of plants. Safety is important for the use of any type of therapeutic, but the ethical aspects, patents and the intellectual property must also be considered. There are doubts even on the object to regulate: the plant, the products that are derived from it or the medicines that contain it.

Native people are contributing decisively to a better knowledge of the traditional remedies, including both the identification and the form to use them. It would be important to find the method to give these people back the elaborated information from these remedies so that they could get benefits from the ethnopharmacological research. Now that we speak so much about globalization, it would be very positive to include in it, as a positive aspect, the extension of the benefits that brings the best knowledge of medicinal plants.

Much of our present knowledge of pharmacology comes from the information obtained from the American expeditions, the incorporation of the Amerindian medicines allowed the development of the European medicine of the XVI and XVII centuries, but we have a great deal to learn from the south American and central American people. In this sense, it can be interesting the execution of repertoires that collect the uses and the traditional procedures of harvesting of the medicinal plants, but it is also necessary to apply the international legislation on species threatened and that the use of medicinal plants could be done from the principles of the sustainable development. European ethnobotanical and ethnopharmacological knowledge must be also conserved.

From the perspective of a professor of pharmacology, it is very important to consider the traditional remedies and especially medicinal plants not only as a new medicines obtaining source, but also as a different method of therapeutics. It is also important to contextualize its use and to respect the traditional procedures, considering that the medicines have cultural components that cannot be separated from its chemical composition. It would be interesting to incorporate the Ethnopharmacology as an academic discipline in the curricula of different university studies in both health and social sciences; this inclusion would contribute to the protection of the traditional knowledge. We should be conscious that the Ethnopharmacology is not only applicable in populations that do not have access to the conventional medicine, but it can also be an excellent alternative in the developed countries.



## Conclusions and perspectives. An ethnopharmacology without pharmacology?

CARLA P. AGUIRRE MARCO

First of all I would like to thank all the delegates who have made the international congress drawing to a close today a reality, with the satisfaction of having fulfilled most of the original objectives. I must apologise if we have failed to meet all your needs and expectations but I believe that the general attitude of all those of you who have come to Valencia has spontaneously enhanced exchanges and cordiality on academic, scientific and also personal levels and made this colloquium on ethnopharmacological and cultural crossbreeding a success.

One of the aims of the congress was to bring the American and European worlds closer together in the realm of ethnopharmacology, by taking advantage in some way of the privileged position of Spain with its deep-rooted tradition of Hispano-American relations. But not because the experts on the continents do not collaborate – for they do, and with very fruitful results as I believe has been clearly demonstrated – but because to date the American world has barely been represented in the colloquia held by the European Society of Ethnopharmacology, or at least in comparison with Africa and Asia. These congresses usually bring together experts from over 30 countries, and this occasion, with almost 180 participants from 39 different countries, is no exception. Their contributions have arrived from almost all European regions, from Central, South and North America, from Mediterranean Asia, Middle and Far East including South Eastern Asia, from the Indian subcontinent, from Northern and Sub-Saharan Africa till South Africa, and from Oceania.

I think it is important to have given the floor to the American world for not only it has been and still is innovative and efficient in the realm of ethnopharmacology, but it is also an expert, so to speak, in cultural crossbreeding. This situation arises of course not only from its historical, political and economic reality – but also, it must be said, by the day-to-day life of its inhabitants. This reality obliges them to find practical, highly original and effective solutions, often with few resources, to problems which we Europeans may discuss more but without resolving them. Their considerable experience, achievements but also failures highlight innovative areas in the theoretical debate too. This is very obvious particularly as regards the question of how the achievements of the field work carried out by anthropologists, botanists and pharmacologists are to be ploughed back into the field.

It has already been demonstrated on many occasions that as long as research is directed by multinational pharmaceutical companies, it is hardly possible to plough the work back into the community where it was carried out because this was not envisaged at the outset in the original aims of the project. This is not a matter of researchers' goodwill but the strict application of scientific method, as it is applied to other aspects of the research. Present-day innovations in this respect mean that the native inhabitants themselves and the governments of developing countries now demand compensation rightly – and as now acknowledged by the international community – from the industries, academic institutions and professionals working on them or in their milieu. Such compensation is usually of an economic nature although it also encompasses copyright and certain patent system alternatives.

When research springs from the community, guided by the needs of the community itself, we have seen the failure Xavier Lozoya told us about: twenty-five years of sterility, if we measure it in terms of the patented medicines of interest to the industry that produces and markets them. But we also saw the success of certain NGOs who have disregarded pharmacology almost entirely and focused on recuperating effective medicines from the natural folk pharmacopoeia of the community they work in and whose well-being they strive to improve. We have however also heard Armando Cáceres tell us about the results of an unusual enterprise: Farmaya, originally an NGO working for and in the community, which has become a self-financing, profit-making industry. They develop the medicines and techniques needed for the health and well-being of the peoples living where they carry out their ethnobotanical and ethnomedicinal research: peoples to which the researchers belong, in fact. The products in question are basically simple and compound plant-based drugs that are researched and developed using pharmacological methods, whilst remaining open to the patent systems of other industries.

In theoretical terms, when the main aim is community development, then a truly multidisciplinary approach is essential. It is the knowledge of the global vision of a people, its history, language, society and culture, its medicinal system, food, pharmacopoeia, the illnesses it suffers, its hopes and its needs, what affect the successfulness of ethnopharmacology as a scientific discipline and its practical results. The aim would be to understand an integrated whole, a cultural system that has its own history. Belonging to the community would then be a desirable aim, which Latin American researchers sometimes fulfil from the outset.

The acknowledgement of anthropology and botany in particular situates them almost on a par with pharmacology in present-day ethnopharmacological studies. Until very recent times they have been thought to play a secondary role in the research of pharmacologists and the pharmaceutical industry in charge of high-flown research and the manufacture of the coveted end-products. They have been “used” to serve pharmacology and pharmacy. It is some time since the industry itself and the academic world realized – as experience has shown – in the realms of finance and copyright, that they are essential in order to obtain precise information about the natural medicines that pharmacology then researches experimentally. A truly multidisciplinary study is however a very difficult achievement, particularly as regards the social sciences and even more concerning history among them. History, as essential discipline to unearth the sources of present-day knowledge, played an important role in the previous, 4<sup>th</sup> edition, of this colloquium. Its applied use is more difficult to



---

see, although in this colloquium we have had several noteworthy examples of how the interpretation of ancient medical, literary and sacred texts can also contribute to obtaining cures for malaria no less.

Once again we have witnessed two different visions of ethnopharmacology: that of the developed, western world and that of the developing world or, less euphemistically, the rich and the poor. Each vision operates in different ways and reaches different conclusions although I do believe that we have seen here a highly prominent convergence in the proposals made by both worlds for ethnopharmacology in the forthcoming years. Highly prominent because it stems from different trajectories and traditions which, in the scientific realm, and in particularly in the field of social sciences, constitutes the statement of some evidence or confirmation of its validity.

The converging proposal from Europe and Mexico could almost be that of an ethnopharmacology without pharmacology. Jacques Fleurentin suggests the model in force in France be applied to any government or people. French legislation - which sanctions the legality in all respects of a list of traditional medicinal plants whose guarantee is their many years of use in France - is in fact the result of acknowledging the experience and knowledge of a people on a par with the knowledge of modern science. Xavier Lozoya suggests that the same status be granted to the clinical experiment that different peoples are in fact involved in: let us confirm the effectiveness of folk medicines amongst the people who make daily use of them, and have been making use of them for centuries, on the basis of their results in the field.

They are not, of course, proposing an end to pharmacology in ethnopharmacology, please excuse me for exaggerating, but in both proposals, the newly acknowledged driving force of ethnopharmacology is social science, in fact, the peoples themselves: their knowledge and practices, always crossbreeds after all.



---

## Discurso de clausura

J.L.FRESQUET

Finaliza hoy el 5º Coloquio Europeo de Etnofarmacología. Creo que los objetivos que nos marcamos cuando comenzamos el pasado jueves, se han cumplido sobradamente.

Se ha puesto de manifiesto la relación que existe entre los saberes indígenas sobre las plantas y los saberes científicos, dos formas de ver una misma realidad, que ha de ser tan beneficiosa para los grupos que proveen la información como para aquéllos que la recopilan, la clasifican y la investigan científicamente. En ningún caso el camino debe ser unidireccional.

Se ha reflexionado sobre los estudios científicos de las plantas indígenas a través de varios ejemplos, pasando de los usos tradicionales al establecimiento de una fitoterapia racional y las condiciones en que debe de hacerse. De gran interés ha sido la revisión de los distintos proyectos que está desarrollando en estos momentos CYTED (Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo) en distintas zonas de centro y sudamérica.

A través de los estudios históricos se ha demostrado que la ciencia es un producto mestizo y que el mestizaje ha enriquecido siempre el arsenal terapéutico de que dispone el hombre para hacer frente a la enfermedad. El tema se ha centrado en uno de los principales hitos históricos de la historia de la medicina: la incorporación de las plantas americanas a las farmacopeas europeas. Este acercamiento ha servido, además, para poner de manifiesto que los estudios históricos son de gran valor para el desarrollo de la farmacología.

Por último, hoy mismo hemos analizado la situación de la legislación sobre fitofármacos en la Unión Europea que dista mucho de aunar criterios de cada uno de los países y de los sectores implicados. También hemos podido comprobar la utilidad que puede tener la etnofarmacología en los planes de acción de las ONGs.

El Coloquio, como otras veces, ha trascendido el ámbito europeo y ha llegado al último rincón del mundo. Como es lógico, en esta ocasión han tenido especial relieve los proyectos y estudios que se llevan a cabo en América Latina, reflejo de una actividad seria y rigurosa en el campo de la etnofarmacología.

Para finalizar, los organizadores de este Coloquio queremos agradecer la colaboración que nos han prestado las instituciones sin cuyo apoyo hubiera sido imposible llevar a cabo este Coloquio: UNESCO, Ministerio de Ciencia y Tecnología, Oficina de Ciencia y Tecnología de la Comunidad Valenciana, Consejo Superior de Investigaciones Científicas, Universidad de Valencia y Jardín Botánico de la Universidad de Valencia.

Simplemente darles las gracias más sinceras a todos ustedes por su participación y desearles un feliz regreso.