

Introduzione/*Introduction*

MOVING PLANTS, TRANSFORMING MEDICINE

ALAIN TOUWAIDE

University of California Los Angeles (UCLA)

Los Angeles, CA, USA

The Huntington Library, Art Collections, and Botanical Gardens,

San Marino, CA, USA

Institute for the Preservation of Medical Traditions

Washington, DC, USA

The introduction of non-native medicinal plants into a new environment and the subsequent modification(s) of medicine are often considered, in medical historiography, to be a defining process of the Renaissance characterized by the discovery, importation to Europe, medicinal use, and study of the species from a world that became *ipso facto* “new” upon its discovery by Christopher Columbus in 1492. From Oviedo to Hernandez and the publication of the *Thesaurus* by the Accademia dei Lincei in 1651, passing through Nicolas Monardes and the national competition arisen out of the introduction of tobacco into medicine, without mentioning guaiac for the treatment of syphilis, the 16th and the early 17th centuries went from one discovery to another, with therapeutic trials and successes, ephemeral and durable treatments, but also false promises and failures, all of which deeply transformed therapeutics.

Going further backward in time, a similar phenomenon can be detected at Cordoba in the 8th century, where °Abd al-Rahman I imported the plants of his native Syria to Andalusia. In the 10th century, local scientists came in contact with the major synthesis of Antiquity on the medicinal uses of plants, *De materia medica*, by the Greek

Dioscorides (1st century), through its translation into Arabic made in the 9th century in Baghdad. Further on, during the 12th and 13th centuries, Cordoba became the seat for a school of botany best illustrated by al-Ghafiqi and ibn al-Baytar al Malaqi. Considered the greatest botanists of the Arabic World, both compiled vast collections of data on medicinal plants from all over the known world of that time. Building on local expertise as well as the achievements of the pharmaco-botanists in the Eastern Arabic Empire, they included in their works information on the non-native botanical species that were traded all across the Mediterranean and introduced in to new environments.

Pursuing even more historical exploration but without zooming in on the Roman Empire for example, a precedent can be found in the expedition of Alexander the Great to the East. The young Macedonian, who had been educated by Aristotle, ensured that scientists accompanied his troops and explored the countries they crossed, from the shores of the Mediterranean to the Hindu Kush and the Himalaya. These scientists discovered innumerable different natural environments and brought back to Alexandria a rich collection of material and data that was further analyzed at the *Mouseion* and expanded the Hippocratic range of *materia medica*.

Moving through the centuries and the millennia, today, Western medicine is living a similar experience, with the constantly increasing influx of *materia medica* from other medical systems, be they Traditional Chinese Medicine, Ayurveda, or Tibetan Medicine for example. From the Green Movement in Germany and France in the 1970s to the present assimilation of non-western medicines into daily practice through the concept of *holistic medicine* (not limited to medicinal plants, but including such other modes of therapy as acupuncture, moxybustion or massage for instance), Western medicine is on the verge of a possible deep transformation. Not only does it expand the scope of its therapeutic arsenal, but it also absorbs no-

tions that not so long ago were extraneous, if not unorthodox, as, for example, *yin* and *yang* or *qi*, which might lead Western mainstream medicine to modify some of its basic tenets. All of this relies on the implicit assumption that imported practices and medicinal substances (particularly herbs) developed and used over the centuries on specific populations in typical environments with all their components (not only climatic and geo-physical in the Hippocratic way, but also genetic and pathological) are transferable to other populations living in different environments.

The current worldwide circulation of non-native botanical species moves beyond *materia medica* and medicine to foodstuffs and nutrition. Food procurement has tremendously expanded in recent decades through globalization and it modifies habits of consumption. Changes in nutritional traditions go together with deeper, notional transformations, from year-round availability of foodstuffs thus far considered season-dependent, to preventive health measures through consumption of foodstuffs credited with special benefits. Sometimes the two poles of this spectrum coincide, and foodstuffs deemed particularly healthy that until recently had only seasonal availability can now be found throughout the year, all over the world, thanks to a trans-hemisphere trade that blurs the very notion of seasonality, if it does not erase it altogether from the conceptual universe of present younger generations. Such constant availability has the potential to assimilate foodstuffs to medicinals industrially produced, with standardized properties, stable through time and universally efficacious.

Such ongoing processes invite the scrutiny of deep history in order to possibly identify earlier identical or similar phenomena and, if detected, to analyze them, examine the circumstances in which they developed, measure their lifespan, follow their life cycle, and identify contributing factors. Multiple questions are to be asked beyond substance availability. Did relevant information accompany the substances traveling from one region to another? Should the full origi-

nal information not be intact, what component resisted a possible long geographical and chronological journey? If original knowledge was modified, what new elements were introduced, and where and when did they originate along the way? Or, to mention just some of the questions raised by the transfer across milieu(s), hemispheres and human populations, how did the receiving ecosystems and their original bio-diversity (not only floral, but also animal) react to these introductions?

The present fascicles of *Medicina nei Secoli* offer 13 contributions as varied as the current mosaic of medical practices and systems available in Western medicine with the multiple questions they prompt. The authors come from different scientific backgrounds: not only the academia, but also the procurement of medicinal plants and the practice of natural and traditional medicines. Within academia, they work at all stages of scientific careers, from PhD candidates to seasoned researchers and university instructors. Professionals are scientists with both field and marketing experience, besides independent scholars on the forefront of applied anthropological research. Disciplines span Near Eastern Studies, Classics, Medieval History, Byzantine History and East Asian Languages and Cultures, and also Anthropology, Medical History, and Environmental Studies, in addition to Botany, Agronomy, Ethnobotany, and Ethnopharmacology, as well as Natural Medicines, Chinese Medicine, and Martial Arts. Authors come from Spain, Greece, Italy, Germany, Poland, China, Mexico, Bolivia, the United States and Canada.

The sequence of the articles is loosely chronological though none corresponds to an exact time period or is circumscribed to a unique region, particularly because all deal with trans-regional, century-long processes of transmission of plants, uses, and knowledge. None of the articles can-or should-be seen as a finite entity that can be precisely located in a geo-chronological model. In effect, their sequence here is a first-aid device intended to avoid an over-determined read-

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ing of the collection, allowing, on the contrary, for other arrangements and re-combinations on the basis of the problem(s) the papers explore, the facts they lay out, the new avenues they open, or the methodological model(s) they test and propose for further investigations. This is a collection open for readings potentially as numerous as the developments arisen from the introduction of non-native plant species into new environments thanks to human creativity, inventiveness, and necessity.

Correspondence should be addressed to:

Alain Touwaide

email: research@medicaltraditions.org

