

Scientific discourses as arguments of authority in legal and political fields

The case of seed dematerialization and its legal regime

Pierre WALCKIERS

Centre de Philosophie
du Droit (CPDR)

UCLouvain

Supervisors
Christine Frison and
Olivier De Schutter



Institut pour la recherche interdisciplinaire
en sciences juridiques et criminologique

Short Biography

Pierre Walckiers is a PhD candidate at the Centre for Philosophy of Law (CPDR) at UCLouvain (FNRS Research Fellow). His research examines the use of scientific argumentation in legal discourse, particularly within the global governance of genetic resources. He holds master's degrees in Law (ULB), Philosophy (UCLouvain), and Interdisciplinary European Studies (College of Europe, Natolin), and completed the Bluebook Traineeship at the European Commission (DG AGRI, Legal Service).

“The protection of plant genetic resources is not just a technical challenge; it is a political, ethical and legal imperative for humanity.”

Esquinas-Alcázar, J. (2005). Protecting crop genetic diversity for food security: political, ethical and technical challenges. *Nature Reviews Genetics*, 6(12), 946–953.

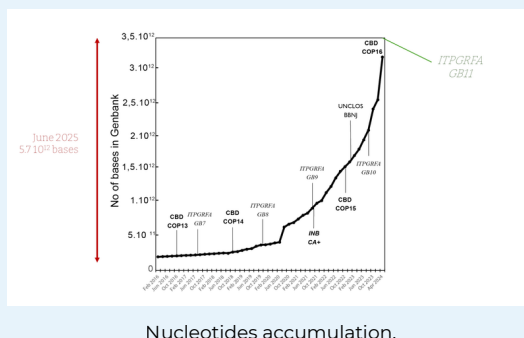


ABS and Digital Sequence Information

Are Access and Benefit-Sharing Instruments Keeping Pace with Digitalization ?

Access and benefit-sharing (ABS) instruments such as the Treaty on Plant Genetic Resources for Food and Agriculture

(ITPGRFA) have faced major controversies concerning the dematerialization and legal status of Digital Sequence Information (DSI). This trend destabilizes the already fragile balance of ABS systems, as researchers and industries can rely on genetic sequence data without triggering benefit-sharing obligations. Moreover, while the exchange of physical seeds is strictly regulated through intellectual property regimes, the related genetic information is sequenced, published, commercialized, and appropriated without the consent of Indigenous or local communities or of the countries from which the physical genetic resources originate. In this context, this thesis analyzes the role of scientific arguments in these debates. It examines how science is mobilized to frame the phenomenon of dematerialization, how such arguments influence interpretations of the Treaty so as to include or exclude the intangible elements of genetic resources, and how they shape which forms of knowledge are considered valid in these negotiations.



Nucleotides accumulation.

Methode and Corpus

International law; philosophy of law and science, including posthuman and relational approaches; legal-technical interpretive methods; and discourse analysis.

Empirical material draws on collaborative research in Indigenous contexts and participant observation at the European Commission, the European Parliament, and the ITPGRFA Governing Body.

Relational Approaches

The thesis advances a relational approach to law and knowledge to protect farmer–seed relations, and move beyond nature/culture and material/immaterial divides. It highlights Indigenous knowledge and argues that the ITPGRFA should not be read solely through Western positivist models, showing that its positive legal elements invite diverse knowledge systems in defining the value of genetic resources.

More Information

- KAHEHTOKTHA BRANT J., WALCKIERS P., ALEXIS A., “La semence, la séquence et l’esprit: penser la dématérialisation des plantes au prisme d’une approche cosmopolitique du droit et des savoirs,” *Louvain Law Review* [Accepted for publication]
- AUBRY, S., FRISON, C., WALCKIERS P. “Keep talking while everything gets sequenced?”. *Journal of Global Health Law* [Accepted for publication]