

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Knowledge integration to evaluate One Health: process evaluation of West Nile Virus integrated surveillance in Northern Italy

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/1679803> since 2018-10-31T11:28:16Z

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

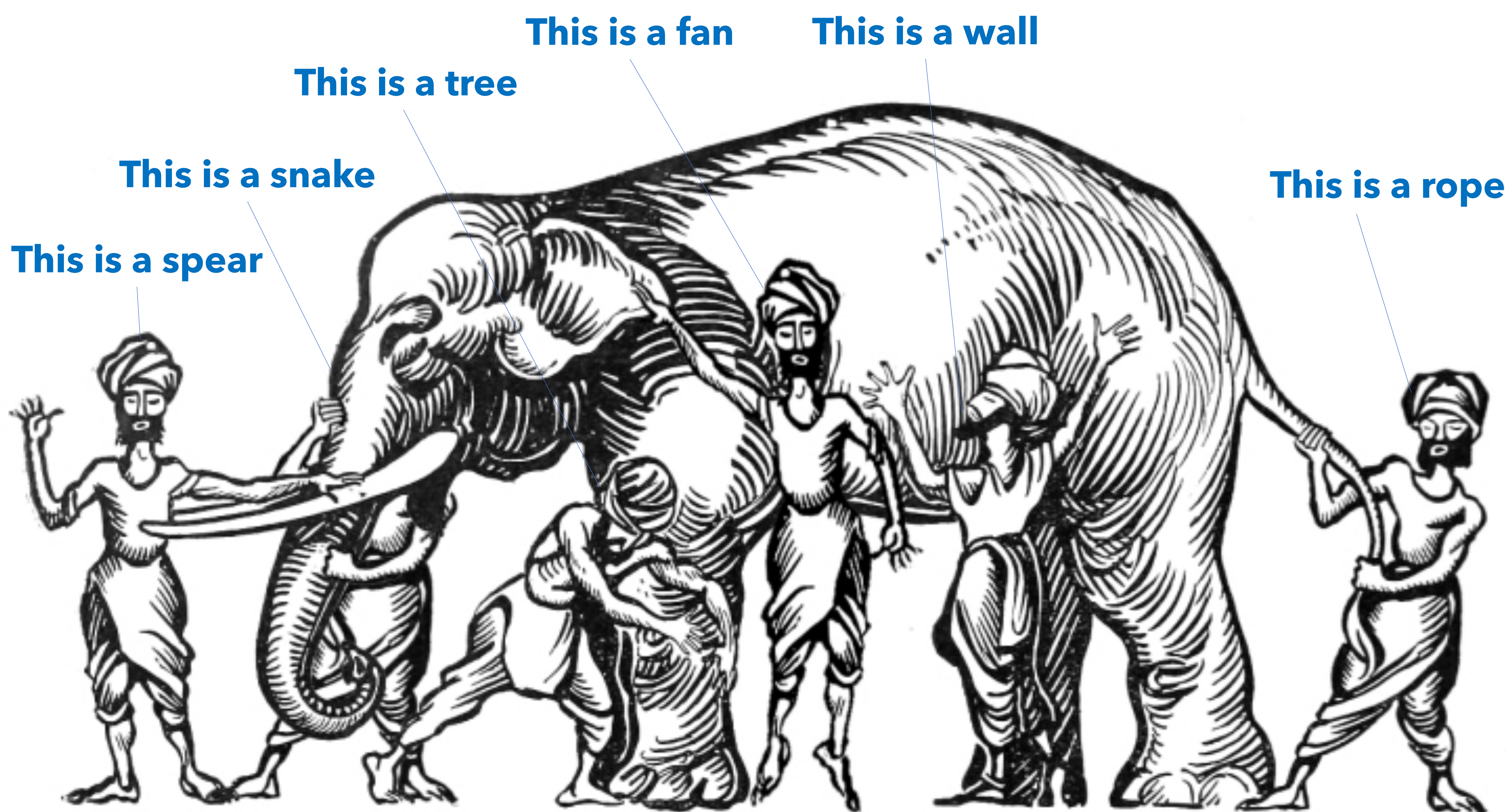
(Article begins on next page)

KNOWLEDGE INTEGRATION TO EVALUATE ONE HEALTH

PROCESS EVALUATION OF WEST NILE VIRUS INTEGRATED SURVEILLANCE IN NORTHERN ITALY

Giulia Paternoster*¹ Laura Tomassone*² Monica Marchino² WNV surveillance working groups of Emilia-Romagna, Lombardy and Piedmont regions³
Barbara Vogler⁴ Giacomo Balduzzi⁵ Anna Rosa Favretto⁵

 giulia.paternoster@uzh.ch – laura.tomassone.unito.it



The parable of the "Blind men and an elephant". Illustrated by Robert W. Williams, 2017, modified

The first version of the story is traceable to the Buddhist text Udana (mid 1st millennium BCE). A group of blind men, who have never come across an elephant before, learn and conceptualize what the elephant is like by touching it. Each blind man feels a different part of the elephant body, they then describe the elephant based on their partial experience. The moral of the parable is that humans have a tendency to project their partial experiences as the whole truth, ignore other people's partial experiences, and one should consider that one may be partially right and may have partial information (Wikipedia).

1. Introduction

The core of **One Health (OH)** is the **integration of knowledge and perspectives** at the **science-policy interface**. Its key mechanism is **transdisciplinarity**, which **integrates society and science** by including relevant stakeholders to effectively tackle complex health problems [1]. Accordingly, the evaluation of **OH** initiatives requires a transdisciplinary approach, integrating multiple sciences and perspectives.

2. Method & results

We performed a **process evaluation** of **West Nile virus (WNV) surveillance** in three regions of Northern Italy by integrating the expertise of social and life sciences. The evaluation was performed in 2017 and 2018 using **focus groups where surveillance "actors" – members of transdisciplinary and trans-institutional working groups (WG) – were interviewed as privileged observers**. Our **evaluation** combined the analysis of the **surveillance legal framework** and **organizational processes** aiming to investigate the **relationship between scientific evidence and the production and implementation of the legislation** aimed at protecting the population from **WNV** disease.

4. References

- [1] Rüegg SR, McMahon BJ, Häsler B, et al. A Blueprint to Evaluate One Health. *Frontiers in Public Health*. 2017;5:20. doi:10.3389/fpubh.2017.00020.
- [2] Wenger E, McDermott RA, Snyder W. *Cultivating Communities of Practice: A Guide to Managing Knowledge*. 2002. Harvard Business School Press: Boston, Mass.
- [3] Paternoster G, Tomassone L, Tamba M, et al. The Degree of One Health Implementation in the West Nile Virus Integrated Surveillance in Northern Italy, 2016. *Frontiers in Public Health*. 2017;5:236. doi:10.3389/fpubh.2017.00236.

1. Section of Epidemiology, Vetsuisse Faculty, University of Zurich, Zurich, Switzerland

2. Department of Veterinary Sciences, University of Turin, Grugliasco, Italy

3. Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna (IZSLER), Brescia, Italy – Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta (IZSTO), Turin, Italy – Regional Health Authority of Emilia-Romagna, Bologna, Italy – Unità Organizzativa Prevenzione, Direzione Generale Welfare, Lombardy Region, Milan, Italy – Azienda Regionale Emergenza Urgenza (AREU), Milan, Italy – Servizio di Riferimento Regionale di Epidemiologia per la Sorveglianza la Prevenzione e il Controllo delle Malattie Infettive (SeREMI), Alessandria, Italy – Centro Agricoltura Ambiente "G. Nicoli" (CAA), Crevalcore, Italy – Istituto per le Piante da Legno e l'Ambiente (I.P.L.A. S.p.a.), Turin, Italy – Regional Blood Center, Azienda Unità Sanitaria Locale (AUSL) Bologna, Bologna, Italy – Agenzia di Tutela della Salute (ATS), Milan, Italy – Amedeo di Savoia Hospital ASL TO2, Turin, Italy – Azienda Sanitaria Locale AL (ASL AL), Alessandria, Italy – Struttura regionale di coordinamento per le attività trasfusionali ASL TO4 Ivrea, Turin, Italy – Struttura Complessa Igiene e Sanità Pubblica ASL TO1, Torino, Italy

4. Department of Poultry Diseases, Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Zurich, Zurich, Switzerland

5. Department of Political and Social Sciences, University of Pavia, Pavia, Italy

6. Department of Jurisprudence and Political, Economic and Social Sciences, University of Eastern Piedmont, Alessandria, Italy

* These authors contributed equally to this work

3. Conclusion

The **integration of knowledge, rules, and policy objectives within the WG** was identified as a **key factor influencing the implementation, effectiveness, social recognition, and results of the surveillance**.

Formal and informal **communication** among the actors – constituting so called "communities of practice" [2] – **is an indicator of such integration, resulting in the generation of shared rules and procedures that may become legally established**. The nature and dynamics of knowledge integration processes must be considered to build more powerful policies for public health protection.

The **integration of expertise from social and life sciences** helped us to perform a detailed **analysis of the surveillance planning and implementation and to describe the entire "elephant", i.e. the surveillance, combining various perspectives**.

The future step of our work will be to **confront this process evaluation with the assessment of the degree of OH implementation** of the **WNV** surveillance, performed according to the evaluation protocol developed by the Network for Evaluation of **OH (NEOH)** [3]. This may result in the validation of the **NEOH** evaluation protocol.

The authors would like to thank all focus groups participants and NEOH