War-Affected Soil and the Organisation of Scientific Inquiry

Thematic overview of twelve contributions

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P&D Conference 2026 / Prague / 17 October 2026
11:20–11:40

English speaker manuscript / 20 minutes

The overview follows the development of one research programme. An unexpected absence of direct soil contributions leads to an open examination of weaknesses in scientific practice. The series then proposes new research organisation, demonstrates new objects and concludes with the material conditions required for empirical testing.

The spoken text contains 2,566 words. Slides 1–16 have delivery windows totalling 20 minutes, approximately 128 words per minute including pauses. Slide 17 contains the reference record and is outside the spoken timing. Rehearsal determines the actual duration.

Presentation structure

Each contribution occupies one slide, combining its programme title and attribution with its title page and main idea. The order of the twelve contributions remains fixed. The opening explains their relationship, and the conclusion connects criticism with an empirical research programme.

Presenter timing

Slide	Window	Subject
1	00:00–00:30	Overview
2	00:30–01:30	Logic of the series
3	01:30–02:55	Unexpected absence of soil papers
4	02:55–04:20	Citation error and certification
5	04:20–05:45	Central place theory and scientific innocence
6	05:45–07:10	Soviet inheritance and academic support for war
7	07:10–08:35	Verdun and the Somme
8	08:35–10:00	Political taboo
9	10:00–11:25	Research infrastructure
10	11:25–12:50	Scientific Recognition Architecture
11	12:50–14:15	Recognition and critical practice in New Zealand
12	14:15–15:40	Fibre-optic drone residue
13	15:40–17:05	Configurational soil object
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15	18:30–19:30	Collective conclusion
16	19:30–20:00	Discussion and closing

Spoken manuscript

Slide 1 Overview

00:00–00:30 / 30 seconds

This overview presents twelve contributions as one developing argument. We begin with an unexpected gap in conference preparation and examine weaknesses in contemporary scientific practice. We then present a new organisation of research, illustrate the objects it should investigate, and conclude with the conditions for testing new theories. Each contribution retains its own question. Their order explains why the practical research programme is necessary.

Slide 2 Logic of the series

00:30–01:30 / 60 seconds

The starting point is practical. The conference contains many contributions, and these twelve papers receive one collective overview. Their sequence follows the development of our research question.

Paper one records the initial surprise. Papers two to six examine scientific weaknesses: certification without adequate checking, selective disciplinary memory, inherited state dependence, fragmentation and political taboo. Papers seven to nine propose organisation and operations that can support continuing inquiry and practical response. Papers ten and eleven show substantive changes in what we recognise as an object. Paper twelve asks how those propositions obtain a fair empirical test.

This sequence connects criticism with research design. We speak openly about the scientific community because its decisions shape what can be known about dangerous environmental processes. We also specify an alternative and accept the obligation to test it.

Slide 3 Unexpected absence of soil papers

Why Were There No Papers on War-Affected Soil at a Conference on the Effects of War on Soil. Protocols of Expert-AI Scientific Inquiry.

Dmitry Nikolaenko

01:30–02:55 / 85 seconds

The first paper begins with an unexpected organising experience. The conference originally focused on the effects of war on soil and freshwater. Hundreds of invitations, including approaches to published specialists, produced virtually no independent proposals centred directly on affected soil. Expanding the programme made the conference richer, but it also made the original absence more visible.

This observation opens the series. It does not establish that nobody studies war-affected soil anywhere. It asks why the proposed object failed to become a shared question in this particular setting. The expert–AI protocol develops a distinction between readiness to participate in an accepted project and readiness to examine the foundations of that project. An organisation can possess technical expertise while remaining reluctant to reconsider what it studies.

The organising experience therefore becomes a metascientific question. Which questions receive attention, which remain outside stable programmes, and what evidence would explain

the difference? Outreach records and project decisions could test the proposed institutional explanation. Our surprise becomes the reason to examine the scientific community itself.

Slide 4 Citation error and certification

How a Citation Error Became Certified Knowledge.

Laboratory of Information Systems

02:55–04:20 / 85 seconds

The second paper moves from an absence to a concrete published failure. A review entitled Impact of War on Soils gives 121,406 square kilometres as territory affected by wars. Its reference fifty-nine leads to an article about the land portfolio of the United States military. Converting nearly thirty million acres into square kilometres reproduces the published number. The arithmetic works. The cited source measures military property, including uses that do not establish damage to soil.

This is an elementary category error with consequences for the review's opening account of the global problem. The audit also examines the denominator, the treatment of soil and the imbalance of the bibliography. Here the criticism concerns inspectable claims and sources.

The larger question is how the statement passed through authorship, review, editing, publication and subsequent recommendation. Every stage can rely on the authority of another stage until nobody checks the substantive connection. Publication then certifies an unsupported claim. Scientific responsibility requires an answer to the documented mismatch and a correction that remains visible wherever the claim circulates.

Slide 5 Central place theory and scientific innocence

Central Place Theory After 1945 and the Production of Scientific Innocence.

Laboratory of Military Ecotones

04:20–05:45 / 85 seconds

The third paper examines the historical account through which a discipline recognises its own achievements. Central place theory often appears as an elegant spatial model. The presentation restores Christaller's planning work for conquered Eastern territories under the Nazi regime and asks why that work became optional in later accounts of the theory.

Chronology matters. Christaller completed his dissertation in 1932 and published the book in 1933. His wartime planning followed. We should preserve those distinctions while examining how the model entered a political project involving territory and populations. The criticism concerns the later separation of scientific form from the institutions and purposes that used it.

The paper calls that reconstruction the production of scientific innocence. A disciplinary classic can retain its authority while its politically consequential history disappears from normal teaching and discussion. This mechanism matters beyond one theory. If an expert community treats its involvement in violence as external to its scientific history, it weakens its capacity to investigate the environmental consequences of violence. Open historical examination belongs within scientific responsibility.

Slide 6 Soviet inheritance and academic support for war

From the Formation of the Soviet Scientific System to the Involvement of Russian Academic Organizations in the War Against Ukraine.

Laboratory of Military Ecotones

05:45–07:10 / 85 seconds

The fourth paper brings institutional history into the present war against Ukraine. Its central question concerns how academic organisations can retain their professional forms while repeatedly adapting their account of reality to state demands. Degrees, journals and councils continue. The framework of acceptable explanation changes with political authority.

The proposed concept of super-normal science describes that dependence. The paper traces its formative conditions to the Soviet system and examines negative selection against autonomous problem formulation. Ignoring this totalitarian inheritance makes contemporary academic involvement appear disconnected from the institutions that prepared it.

The presentation uses dated institutional cases. They include changes in academic status in Crimea, the governing structure of the Russian Geographical Society, and the Russian Union of Rectors' public support for the state's account of the invasion in March 2022. These records establish specific roles and statements. The wider mechanism requires comparative testing.

The implication for our subject is direct. An academic system that learns to legitimate state priorities can also shape which consequences of war become investigable. Autonomous inquiry into inconvenient harm therefore has an institutional history that we must examine openly.

Slide 7 Verdun and the Somme

Verdun and the Somme After the Battles: Fragmented Expertise and the Morphology of Long Term Military Contamination.

Dmitry Nikolaenko

07:10–08:35 / 85 seconds

The fifth paper examines Verdun and the Somme after more than a century of research. Military historians reconstruct events. Archaeology and geophysics recover buried objects. Soil science, geomorphology and toxicology investigate environmental processes. Heritage management and clearance define further objects of expertise. The paper recognises this accumulated knowledge and asks why the complete process remains weakly integrated.

The material duration of warfare extends beyond the duration of the battles. Corrosion transforms objects. Water and soil movement redistribute material. Clearance can remove hazards from one place and concentrate them elsewhere. Forestry, cultivation and later construction change the conditions under which people encounter the residue.

The weakness concerns the connections between expert objects. More precise fragments do not automatically reconstruct those transitions. Even a long research history cannot repair an architecture that leaves their relationships without an owner.

The proposed morphology preserves the connection between the military event, residual material, subsequent interventions and later exposure. This historical example gives the series a practical warning: time alone will not produce an integrated account of long-term military contamination. Someone must organise the causal reconstruction.

Slide 8 Political taboo

Political Taboo and the Failure to Recognize Long Term Military Contamination.

Laboratory of Information Systems

08:35–10:00 / 85 seconds

The sixth paper draws the preceding criticisms into an account of scientific admissibility. Political taboo need not take the form of a written prohibition. It can operate through practical decisions about legitimate questions, acceptable time horizons, admissible causal connections and the evidence demanded from different explanations.

Researchers may measure manifestations of a process while the process itself remains outside a shared programme. Questions can be postponed, divided between disciplines, renamed or restricted to a convenient location. The paper calls attention to observations that have neither been refuted nor allowed to become a common problem.

We need to speak openly about this organisation of inquiry. Accepting political taboo as a normal professional constraint can prevent recognition of long-term military contamination. At the same time, a particular allegation of obstruction requires records of decisions and their effects.

The scientific community therefore enters the object of investigation. It produces measurements, participates in military and administrative systems, and determines which records remain available for later reconstruction. Its responsibility includes preserving the possibility of stronger evidence. This completes the diagnostic part of the overview and prepares the constructive response.

Slide 9 Research infrastructure

Building Research Infrastructure for Long-Term Studies of War: Project-Based Laboratories for Field Research, Information Systems, and Decision Support.

Laboratory of Information Systems

10:00–11:25 / 85 seconds

The seventh contribution begins the constructive part. We propose an organisation that can retain a developing research question when particular projects and their funding end. The framework distinguishes permanent laboratory capacity from temporary project teams. Each project has a defined question, participants, budget and responsibilities. The laboratory retains its substantive mission and research memory.

Two laboratories perform different functions within a common organisational framework. The Laboratory of Military Ecotones investigates territories transformed by war and military activity. The Laboratory of Information Systems preserves and interprets the complex information needed to connect observations across projects. Both belong within New Euro Vision in the Czech Republic.

Their continuing responsibility extends beyond retaining a final report. Later work needs source records, methodological decisions, usable data and an account of unresolved relations. Field observations must be able to change the information model, and information analysis must guide further field inquiry.

This is our practical response to fragmentation. The structure makes continuity and verification identifiable tasks. Its performance requires examination through actual projects and their retained records. We apply the same evidential expectations to our own organisation that we apply to established institutions.

Slide 10 Scientific Recognition Architecture

Scientific Recognition Architecture: Operational Specification — Version 1.0.

Laboratory of Military Ecotones

11:25–12:50 / 85 seconds

The eighth paper gives the organisational proposal an operational form. Scientific Recognition Architecture, version one, specifies how researchers can progressively make a developing empirical object scientifically recognisable. The object may change before a satisfactory explanation exists. Research therefore needs operations that preserve observations and relationships while uncertainty remains.

The specification gives the empirical object priority in setting research boundaries. Specialised disciplinary work enters a common investigation. Source records retain their available spatial and temporal context. Inferred causality remains distinguishable from empirical association. Contradictions and changes of direction enter the research record.

Participants can disagree about explanations while accepting a common architecture of inquiry. Version control makes changes in the procedure visible. Review asks whether a difficulty reflects implementation, contradiction or insufficient evidence. Following the specification does not establish the truth of a theory.

The document applies this approach to military ecotones, soil after war and expert–AI work. Its contribution is an explicit procedure for continuing inquiry when familiar classifications leave the object incomplete. The next requirement is operational use and empirical examination of whether the architecture improves recognition and explanation.

Slide 11 Recognition and critical practice in New Zealand

From Scientific Recognition to Critical Practice. Support for Military and Emergency Services Personnel in New Zealand.

Rex Alexander and Samuel Mann

12:50–14:15 / 85 seconds

The ninth contribution develops the recognition framework through a different practical field. Rex Alexander and Samuel Mann examine support for military and emergency services personnel in New Zealand. The original presentation carries the fuller title Equitable and Consistent Support in New Zealand Law for Defence Force and Emergency Services Personnel. The programme title highlights its connection with our series.

Their question concerns harm that can outlast both service and institutional recognition. Exposure histories, health outcomes and compensation records remain divided between organisations. Discharge can interrupt monitoring and care. Recognition needs consequences for the affected person.

The authors extend the framework through Critical Practice and Critical Regeneration. Critical Practice asks what must change now in protection, treatment and redress. Critical Regeneration asks how the system should change through continuing research, connected records and accountable governance. These regimes can coexist.

The contribution uses comparative conceptual case analysis rather than a new dataset. It demonstrates development of the original idea: scientific recognition acquires practical and organisational responsibilities. The framework reaches beyond describing an environmental object to examining how institutions respond to people living with long-term consequences.

Slide 12 Fibre-optic drone residue

A New Type of War-Related Pollution: Fiber-Optic Drone Tether Debris and War-Derived Polymer Microfibers.

Laboratory of Military Ecotones

14:15–15:40 / 85 seconds

The tenth paper shows what the proposed approach can make visible. Fibre-optic drone operations leave long residual strands across vegetation and the ground. This material has a particular military source and a diffuse filamentous geometry. Assessing it requires measurements of length, diameter, continuity and contact with the landscape alongside mass and composition.

The paper proposes fibre-optic drone tether debris and war-derived polymer microfibers as source and transformation categories. Material identity matters. Optical components and their polymer coatings have different properties. Weathering may connect visible lines with smaller products, but the transformation rates and environmental consequences require measurements.

Photographs establish a visible form of residue. They cannot establish landscape-wide quantities or all the proposed biological effects. A field programme would connect mapped deposits with material analysis, soil and sediment observations, and repeat visits. Attribution must also distinguish the new deposit from older civilian plastics.

This is a substantive novelty in the series. A changed military technology produces an object that familiar inventories may inadequately describe. Scientific recognition begins by defining that object and specifying the evidence needed to examine its developing consequences.

Slide 13 Configurational soil object

Soil After War As a Configurational Object of the Military Ecotone.

Laboratory of Military Ecotones

15:40–17:05 / 85 seconds

The eleventh paper proposes a new understanding of soil after war. War changes the regime in which a territory functions. Soil enters that regime through altered impacts, relations and subsequent development. The resulting object has a history and continues to change.

The protocol calls it a configurational object. Its condition depends on the combination and sequence of transformations. Addition introduces material or energy. Destruction changes structures and processes. Cessation ends earlier activities, such as cultivation or drainage maintenance. Reorganisation changes use and access. These transformations can occur together.

This definition allows a war-induced soil transformation to begin without the detection of a new chemical pollutant. An abandoned agricultural territory illustrates the question: cessation of management can change water relations, vegetation and soil development. That example remains a proposition for testing.

Soil also acts as a carrier, archive and active medium. It retains traces, transforms substances and participates in transfer to other media. Pre-war history and repeated observations become part of causal attribution. Research polygons, local repeatable sites and experiments give this theory empirical form. The contribution changes the object that the research organisation must be able to follow.

Slide 14 Right to empirical testing

The Right of a Theory to Empirical Testing: Organisational and Metascientific Constraints on the Study of Soil After War.

Laboratory of Information Systems

17:05–18:30 / 85 seconds

The twelfth contribution concludes the series with the conditions under which a new approach can develop. A theory needs more than formal permission to appear in a publication. Testing requires access to sites and records, an appropriate sampling design, analytical capacity and enough time to examine the proposed relations.

The paper criticises a project regime in which institutional income, repeat contracts and status can displace inquiry. That accusation requires examination of allocations and actual research decisions. Its practical consequence is clear: adding a theory's name to an unchanged methodology does not establish that the project tests the theory.

The right proposed here protects the question and the possibility of empirical correction. It includes publication of inconvenient, negative and uncertain results. Competing approaches should face explicit and comparable requirements.

The urgency follows from the object. We study dangerous processes that continue while institutions decide what counts as legitimate inquiry. A new theory should not spend fifty years obtaining the opportunity for a suitable test. It should receive a timely, proportionate opportunity to demonstrate where it explains the evidence, where it fails and how it must change.

Slide 15 Collective conclusion

18:30–19:30 / 60 seconds

The collective argument now has a concrete outcome. A publication system can circulate an elementary error. A discipline can make political involvement disappear from its history. Institutional dependence and taboo can restrict the questions that researchers formulate. A century of specialist work can still leave the continuing material process fragmented.

Our response is to organise continuity around the empirical object. The laboratories retain research memory. The specification makes operations and revisions inspectable. Critical Practice connects recognition with present support. The new pollution category and configurational soil theory give this organisation substantive work to do.

Every part of that response remains accountable to evidence. The new framework needs tests that can expose its failures. Scientific autonomy includes the ability to ask an inconvenient question and the responsibility to change the answer when observations require it.

Slide 16 Discussion and closing

19:30–20:00 / 30 seconds

We are dealing with consequences that continue after battles, projects and public attention have ended. The next step is a research programme with access, continuity and explicit tests. The twelve contributions explain why that programme is needed and how we propose to organise it. We ask colleagues to examine the evidence, criticise the propositions and help make the necessary empirical work possible. Thank you.

The twelve contributions and their sources

1. Why Were There No Papers on War-Affected Soil at a Conference on the Effects of War on Soil. Protocols of Expert-AI Scientific Inquiry.
Dmitry Nikolaenko. Published protocol, version 1.0. Pollution and Diseases. DOI: 10.66659/rpharj84. The presentation treats the conference organising experience as its starting observation.

2. How a Citation Error Became Certified Knowledge.
Laboratory of Information Systems. Supplied conference presentation and citation audit. Principal audited source: Gordienko (2025), Impact of War on Soils, DOI: 10.1134/S1064229325601209. Reference 59: Sicard (2022), How much land does the military really own?, Military Times.

3. Central Place Theory After 1945 and the Production of Scientific Innocence.
Laboratory of Military Ecotones. Conference paper, DOI: 10.66659/7sdyez12. Supporting critical bibliography, DOI: 10.66659/qta4cs82. The presentation separates the 1932–1933 theory from Christaller's later wartime planning.

4. From the Formation of the Soviet Scientific System to the Involvement of Russian Academic Organizations in the War Against Ukraine.
Laboratory of Military Ecotones. Conference abstract, DOI: 10.66659/wxywk824. The attached presentation draws on official institutional records and the Russian Union of Rectors' appeal of 4 March 2022. The abstract lists Dmitry Nikolaenko as author.

5. Verdun and the Somme After the Battles: Fragmented Expertise and the Morphology of Long Term Military Contamination.
Dmitry Nikolaenko. Conference paper, DOI: 10.66659/7xrc3h86. The supplied presentation draws on research concerning contamination, disposal and subsequent management of First World War landscapes.

6. Political Taboo and the Failure to Recognize Long Term Military Contamination.
Laboratory of Information Systems. Supplied conference presentation. Supporting recognition framework: From Scientific Recognition to Scientific Explanation, DOI: 10.66659/db5ekw49. Political taboo is the paper's explanatory framework.

7. Building Research Infrastructure for Long-Term Studies of War: Project-Based Laboratories for Field Research, Information Systems, and Decision Support.
Laboratory of Information Systems. Infrastructure paper, DOI: 10.66659/vgjtt250. Supporting laboratory charters: 10.66659/tykjpc41 and 10.66659/j7j67v06. Organisational framework: 10.66659/3ny57r95. Source: attached English speaker manuscript.

8. Scientific Recognition Architecture: Operational Specification — Version 1.0.
Laboratory of Military Ecotones. Operational specification, version 1.0. DOI: 10.66659/q52haz36. The attached presentation distinguishes operational compliance from empirical truth.

9. From Scientific Recognition to Critical Practice. Support for Military and Emergency Services Personnel in New Zealand.
Rex Alexander and Samuel Mann. Alexander and Mann (2026), Equitable and Consistent Support, Pollution and Diseases 2: 168–198. DOI: 10.66659/8vjw4853. The attached deck title is Equitable and Consistent Support in New Zealand Law for Defence Force and Emergency Services Personnel. The overview retains the programme title.

10. A New Type of War-Related Pollution: Fiber-Optic Drone Tether Debris and War-Derived Polymer Microfibers.
Laboratory of Military Ecotones. Conference paper, DOI: 10.66659/rp314s66. Full conceptual article, DOI: 10.66659/swfqsz58. The presentation distinguishes documented visible debris from transformation pathways and effects requiring measurement.

11. Soil After War As a Configurational Object of the Military Ecotone.
Laboratory of Military Ecotones. Soil after War protocol, version 1.0. DOI: 10.66659/84a13358. Supporting military-ecotone paradigm: DOI 10.66659/nhzds093. Source: attached English speaker manuscript.

12. The Right of a Theory to Empirical Testing: Organisational and Metascientific Constraints on the Study of Soil After War.
Laboratory of Information Systems. Protocol, version 1.1. DOI: 10.66659/h6bcbb78. Supporting field verification: 10.66659/2qwv2037. The presentation proposes material conditions for testing competing approaches.

Evidence and interpretation

The overview distinguishes specific documentary findings from proposed institutional explanations. The initial conference gap does not establish a universal absence of soil research. The citation mismatch concerns an inspectable source substitution. The historical cases establish particular dates, roles and statements. They do not establish every researcher's private motives or the prevalence of an institutional type.

The laboratory framework and operational specification are proposals whose performance requires examination. The New Zealand contribution applies and extends a conceptual framework. Photographic evidence of tether debris does not by itself establish polymer fragmentation rates or ecological effects. The configurational soil theory requires observations and experiments that can discriminate its propositions from competing explanations.

The right to empirical testing means a timely and proportionate opportunity for a suitable test. It provides no advance guarantee of truth. The proposed framework accepts negative findings, conceptual revision and rejection of unsupported relations.