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

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Slide 1 The Right of a Theory to Empirical Testing: Organisational and Metascientific Constraints on the Study of Soil After War

00:00–00:51 / 51 seconds

A theory can remain untested because its propositions fail, or because organisations prevent it from obtaining the material needed for a test. Those situations require different conclusions. This presentation concerns the second problem and its consequences for the study of soil and freshwater after war. Organisations distribute access to territory, samples, archives, laboratories and funding. They can therefore determine which theories acquire evidence and which remain permanently unsupported. Our criticism concerns a research regime in which institutional returns and status take priority over the problem. The practical demand is that a new theory with testable consequences must be able to develop an independent empirical programme. Publication alone cannot provide that opportunity. The right proposed here has material conditions and responsibilities, including the obligation to record results that contradict the theory.

Slide 2 The published protocol

00:51–01:42 / 51 seconds

The published protocol records how a question about the definition of soil became a question about the organisation of science. The connection is unavoidable. A theoretical claim requires observations, and observations require material conditions controlled by institutions. The protocol distinguishes the real soil system from the portion that a particular programme chooses to record. It also distinguishes scientific disagreement from a procedure that prevents an alternative from producing its own observations. This distinction matters before a consortium divides its budget and assigns its laboratories. Once the leading organisation has fixed the object, indicators and duration, later inclusion of an alternative may be purely ceremonial. The protocol proposes an open examination of those initial decisions, followed by proportionate independent access to testing. This is the main organisational argument of the talk.

Slide 3 Superprofits as the organising priority

01:42–02:36 / 54 seconds

I state the critical thesis directly. In the regime examined here, projects on military pollution are evaluated only in terms of the superprofits they offer research collectives. The term names an excessive institutional return whose pursuit displaces the cognitive task. Material benefits and the preservation of status support the same arrangement, but they must be examined separately. A budget is not itself a profit, and a large grant is not proof of an excessive return. This is an accusation about the organising logic, not an audited financial finding about every project. Its empirical examination requires allocation records, contracts, expenditure, laboratory work, decisions on alternative analyses and access to results. The question is what those resources actually make possible. If institutional reproduction is protected while essential questions remain outside the programme, the project can succeed administratively while failing as an investigation.

Slide 4 An old methodology applied to a new object

02:36–03:28 / 52 seconds

The central methodological problem follows from that institutional arrangement. A group can bring a method developed for a different task into a post-war territory without reconsidering what the new object requires. The measurements may be accurate. Their interpretation as a sufficient account of the territory may still fail. War can interrupt cultivation, destroy infrastructure, alter water relations, release new material or mobilise earlier pollution. The theory of military ecotones treats these changes as a configuration with a history and a trajectory. An agronomic panel or a one-time chemical survey answers a narrower question. Old methods remain useful where their scope matches the task. Their age is not the defect. The defect is refusing to examine whether their selection, scale and duration can detect the new relations that the project claims to study.

Slide 5 Three levels of the expert’s position

03:28–04:23 / 55 seconds

The protocol identifies three levels of the expert's initial position. The declared position appears in the proposal and names a discipline or a systems approach. The operational position determines where to sample, what to measure and when observation ends. The institutional position sets the result that the organisation needs to obtain, such as a recovery recommendation within a fixed deadline. These levels can contradict one another. A broad declaration can conceal a narrow programme, while the programme serves a predetermined decision. Theory therefore precedes the recorded scientific fact through the selection of observations. It does not create the soil or its chemistry. It shapes what the investigation can see. Competence in one fragment cannot authorise a conclusion about every relation. A transparent programme must declare its model, exclusions and limits of competence before presenting its selected fragments as the whole object.

Slide 6 The normative trap

04:23–05:17 / 54 seconds

A regulatory standard has a defined purpose and scope. The normative trap appears when conformity with its selected indicators becomes a complete scientific description of war-affected soil. The protocol calls this normative substitution of theory. The relevant distinctions are concrete. A substance may

have been tested for and not detected within a method's sensitivity. It may have been detected below a threshold. It may never have entered the analytical programme. There may be no applicable standard. These situations contain different information. Compressing them into an overall declaration of safety removes the limits of the investigation. A sample also describes a place and time. It does not by itself establish what will happen after flooding, cultivation or a change in territorial use. Standards retain their regulatory function. The research programme must examine whether their coverage matches the evolving question.

Slide 7 The paradox of forbidden evidence

05:17–06:10 / 53 seconds

The paradox of forbidden evidence is the core mechanism of exclusion. First, an alternative theory is judged to lack evidence. That judgement becomes a reason to refuse access to samples, data, laboratories or a pilot budget. The theory then remains without the observations needed to confirm, revise or refute its claims. Finally, the resulting absence is cited as proof that the theory has nothing to offer. The administrative decision manufactures the evidential deficit used to defend the decision. This sequence must be documented in each actual case rather than presumed from every rejection. Legitimate limits on resources and access still require stated reasons. The relevant question is whether the criteria allow a proportionate test at all. When the answer is no, institutional exclusion has replaced empirical comparison. The alternative has lost before it encounters the object.

Slide 8 Methodological assimilation and imitation

06:10–07:03 / 53 seconds

Exclusion can also operate through inclusion. A consortium accepts a new theory on condition that it uses the leading group's object definition, indicators and time horizon. The proposal now contains diversity, but the field programme has removed the alternative's distinctive question. The protocol calls this methodological assimilation. The resulting activity can acquire the outward forms of research: recognised laboratories, detailed methods, publications and an international consortium. If those activities cannot test the stated propositions, they do not constitute the promised empirical development. This is the sense in which we speak of imitation research. Accurate measurements can exist inside an inadequate programme. Organisational status can certify that the programme ran without establishing that it investigated the new object. The audit must compare the promised questions with the actual observations, including the questions quietly removed during project design.

Slide 9 The material content of independent development

07:03–07:57 / 54 seconds

The right of a theory to empirical development must have material content. It requires an identifiable research track that retains the theory's question and can choose observations relevant to it. It needs proportionate access to samples and data, including historical records where attribution requires them. It needs analytical capacity beyond a compulsory list when the proposed relation demands a different test. A separate allocation must support that work through a justified duration. Samples should remain available for repeat analysis, and negative or inconvenient findings must remain publishable. This is a proposed organisational principle, not a statement that current law guarantees every theory a grant. It also does not require equal funding for every idea. It requires admission

criteria that examine testability and relevance without deciding the truth of the dominant theory in advance. Shared quality requirements remain binding.

Slide 10 Field verification in soil and freshwater

07:57–08:49 / 52 seconds

The field-verification contribution makes the practical consequence explicit. Access to a location is a condition for sampling, not a justification of representativeness. Site selection must follow a process model and a question that the observation can resolve. A soil-to-water hypothesis requires observations capable of distinguishing a source, transfer pathway and receiving environment. A sample from an accessible riverbank cannot automatically describe a catchment, and a convenient field cannot automatically represent a post-war territory. Reference stations, verification sites, experimental polygons and repeated observations have different purposes. The record must state those purposes and the limits of extrapolation. This is where an independent theory becomes an empirical programme. It must translate concepts into observations with discriminatory value. AI can compare information and suggest sites, but it cannot certify representativeness or replace field and laboratory evidence.

Slide 11 Dioxin reconstruction as an independent research task

08:49–09:43 / 54 seconds

The proposed dioxin information framework supplies an example of a question that cannot fit inside one laboratory panel. It seeks to connect archival records of sources, transport and release with environmental distribution, persistence, exposure and later biological observations. Each link needs its own evidence. Digitising a military record does not establish an internal dose, and a later medical observation does not by itself identify a wartime source. The framework proposes a common record in which those links, gaps and competing interpretations remain visible. It therefore requires a project organised around reconstruction across disciplines and timescales. If a consortium reduces it to counting digitised documents or measuring a predetermined list at convenient sites, it has changed the question. Independent empirical development means retaining the evidential chain as the task, while allowing the results to show where that chain fails.

Slide 12 The dolphin case and unequal recognition

09:43–10:35 / 52 seconds

The dolphin contribution examines the distribution of scientific attention among competing explanations. It considers fishing-related mortality alongside demographic, habitat and contamination questions. Its stated purpose is methodological. It does not establish that wartime chemical legacies caused the decline of Hector's or Māui dolphins. Its relevance here is the possibility that an explanation remains outside the research programme before a proper comparative test occurs. This provides a question to examine in soil and freshwater projects: which alternatives receive observations designed around their predictions, and which merely appear in a literature review? Neither rejection nor resistance can settle the causal issue. What matters is the quality and independence of the test. The right to development protects the opportunity to obtain relevant evidence. The same evidence may then weaken, modify or reject the alternative that requested it.

Slide 13 The scientific community in a state of status quo

10:35–11:26 / 51 seconds

The study of theoretical geography in the Soviet and post-Soviet context offers a metascientific explanation of resistance. It proposes the scientific community in a state of status quo, abbreviated SS-SQ, and the implicit bunker of normal science. In that account, a group evaluates novelty through the threat it poses to the group's stability. Publication activity and an established hierarchy can continue while the capacity to respond to new problems declines. We use that account as a model to investigate, not as proof that every soil research institution behaves identically. Its value is the change of object: the community's decisions become material for research. We ask how it admits methods, distributes resources, records disagreement and reacts to findings outside its programme. The prestige of that community cannot exempt those practices from examination.

Slide 14 Open review before budgets and roles

11:26–12:21 / 55 seconds

An international programme should begin with an open theoretical and methodological review before budgets and roles become fixed. Each group must state its object, assumptions, exclusions, required observations and conditions for changing its position. The financial examination must then connect allocations to those tests. It should identify who receives funds, what expenditure purchases, which alternatives obtain resources, and what findings the programme can actually produce. Reviewers need independence from the organisations whose allocations they assess. A retained public record prevents disagreement from disappearing as a drafting detail within the consortium. Protected locations and sensitive data still require appropriate access controls. The purpose is scientific accountability: later readers should be able to compare the initial question with the work performed. This procedure gives the accusation of institutional self-enrichment a route to investigation, while preventing institutional status from serving as its own defence.

Slide 15 The expert–AI record and reciprocal accountability

12:21–13:16 / 55 seconds

The expert–AI system can help preserve the connection between theory, design and evidence. The development protocol records questions, accepted concepts, rejected alternatives and revisions rather than displaying only a polished final account. Information systems can connect those decisions to sample provenance, methods and results. That visibility also applies to our own theory. If a proposed military relation lacks support, if earlier industrial processes explain the result, or if a new concept adds no diagnostic capacity, the record must show the failure and the revision. Novelty creates no exemption. AI assists comparison and organisation, while humans remain responsible for interpretation, decisions and publication. A versioned protocol does not by itself remove institutional control, but it makes important substitutions inspectable. Independent access and an inspectable record must work together if empirical development is to mean more than permission to express an opinion.

Slide 16 Publications supporting the argument

13:16–14:06 / 50 seconds

The right-to-testing protocol provides the main organisational framework. The paradigm and its development protocol define the new object and preserve the theory's revisions. The field-verification paper connects that theory to site selection and evidence quality. The dioxin and dolphin contributions illustrate different forms of reconstruction and competing hypotheses. The geography study supplies a critical account of institutional resistance. These works have distinct roles and cannot substitute for one another. In particular, a theory of resistance is not a financial audit, and an alternative environmental explanation is not automatically a demonstrated cause. Their common demand is that research must preserve the question and obtain evidence capable of changing its answer. The organisational proposals in this presentation make that demand concrete through independent access, transparent allocations and reciprocal accountability.

Slide 17 The right to produce evidence

14:06–15:00 / 54 seconds

The problem concerns the organisation of knowledge itself. When projects serve institutional returns, protect inherited methodologies and turn status into a right to define the object, scientific novelty can remain permanently dependent on the approval of those it challenges. The result can be imitation research: the procedure succeeds while important relations remain outside observation. Our response is a right to independent empirical development for theories that state testable consequences. This requires real samples, data, analytical capacity and a design that retains the question. It also requires common quality standards and an explicit record of failure. We cannot infer a theory's weakness from evidence that institutions prevent it from obtaining. Nor can we protect it from the evidence once a genuine test occurs. Organisational decisions must stop replacing the encounter between a theory and the reality it seeks to explain.

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