

# Metis — smart intelligence in change

*Casual Logic, Propositions and Design Principles for Organizational Change in Complexity*

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## Abstract

Metis refers to a form of intelligent wisdom that enables orientation in uncertain, complex contexts of change without relying on rigid recipes. This conceptual working paper develops Metis as a situationally sensitive, embodied, and temporal competence: the capacity to examine problem spaces, to vary and dose decisions as well as their decision mode in a context-appropriate way, and to shape transitions so that they remain viable. Theoretically, Metis is framed through selected anchors in the fields of complexity and contextual decision logics, sensemaking, and practical knowledge (tacit knowledge, reflection-in-action, situated/embodied cognition). In the archimetic context, Metis appears as a counterforce to over-control, pseudo-clarity, and standardization without contact to meaning.

As a contribution, the text formulates (1) a causal logic (the Metis triad), (2) propositions including pragmatic operationalizations, (3) design principles for cultivating Metis (question capability, observation, dignified experiments, protection of the unfinished), and (4) boundary conditions with test prompts for typical blockages and risks of misuse. In doing so, the paper offers a citable frame of reference for making Metis visible, discussable, and further testable in organizational contexts of change.

## Keywords

Archimedis, Metis, smart intelligence, organizational change, complexity, context logic, sensemaking, practical knowledge, tacit knowledge, transition design

# 1 Blueprint

## 1.1 Problem statement: When systems are logical but not wise

There are moments in which organizations do everything „right“ and yet lose touch with reality. The strategy is coherent, the roadmap plausible, the metrics are green. And still a quiet but persistent feeling emerges: we are steering, but we are not navigating; we are optimizing, but we are losing contact with what is actually happening.

In such moments it becomes visible that what we usually call intelligence is often only a partial competence: the ability to solve defined problems efficiently. This intelligence is valuable. But in contexts of change it sometimes perfects the wrong question.

Metis is the name for another form of wisdom: an intelligence that examines the question before providing the answer – and that recognizes when a problem space must be changed before the cost of holding on increases.

## 1.2 Aim of the paper

This working paper pursues three aims:

1. Conceptual: to clarify and differentiate Metis as a form of intelligent wisdom in change
2. Theoretical–practical: to formulate a causal logic for how Metis works in organizations (and how it is blocked)
3. Design–oriented: to offer design principles for making Metis cultivable without domesticating it

# 2 Contribution

The contribution of this paper can be summarized in six points:

1. It defines Metis as situationally sensitive, embodied, and temporal wisdom in change.
2. It links Metis to complexity and contextual decision logics (decision-making under uncertainty).
3. It frames Metis as practical knowledge (tacit knowledge / reflection-in-action) rather than as a method.
4. It formulates a causal logic (Metis triad): Attention → Context logic → Transition design.
5. It identifies blockages: five confusions that make Metis systematically inaccessible.
6. It offers propositions and design principles for cultivating Metis in organizational contexts of change.

# 3 Methodological note

This working paper is a conceptual theory- and model-building contribution. It is based on

- conceptual-analytic condensation: Metis as a conceptual figure and competence profile
- theoretical triangulation: complexity logic, sensemaking, tacit knowledge, situated/embodied cognition
- practice-near heuristics: observations from organizational change contexts, condensed into causal logic, blockages, and design principles

This is not a systematic literature review, but a targeted selection of reading trails as conceptual anchors. The propositions are formulated in a way that allows further testing and refinement in research, teaching, or reflective practice.

## 4 Theoretical background

### 4.1 Complexity and context logic

In stable situations, linear steering logics work: more analysis, more standardization, more control. In complex contexts of change, these routines often fall short because cause–effect relations are not reliably linear but dynamic and time-lagged. The literature describes different decision logics depending on context and emphasizes learning in complex domains through „probe–sense–respond“ rather than „analyze–plan–execute“ [?].

### 4.2 Sensemaking: Organization as ongoing interpretation

When the world changes, data alone is not sufficient. Organizations must create meaning in order to act. Accordingly, organizations can be viewed as processes of sensemaking in which reality is continuously produced, stabilized, and revised – often retrospectively („retrospective“) and socially mediated [?]. Metis moves within precisely this field. It is wisdom *within* the interpretive process, not outside of it.

### 4.3 Practical knowledge: „We know more than we can tell“

The foundation of professional practice is so-called tacit knowledge. This knowledge is grounded in practical skill, traditions, and situational routines and resists complete rule-based representation [?]. Its application is shaped decisively by processes of „reflection-in-action“, in which thinking occurs directly in action and as a response to the unforeseen [?]. Metis can be understood as a condensed form of this practical knowledge, with a theoretical focus in particular on dealing with transitions and situational uncertainty.

### 4.4 Situated and embodied

Knowledge and learning processes are largely understood as situated. Meaning is formed primarily within the specific context of application and cannot be reduced to purely abstract transfer [?]. This perspective is extended by embodiment theory, which understands cognition as fundamentally embodied and thus inseparably intertwines perception, action, and thinking [?]. This working paper therefore defines Metis explicitly as a form of situated and embodied intelligence that integrates theoretical insight into practical action under situational conditions.

## 5 Boundary: What the literature explains and what is added here

The anchors used in the theoretical background illuminate key facets of acting under uncertainty. At the same time, a gap becomes visible that Metis addresses as a distinct concept.

- Complexity and context logic explains why, in complex domains, experiments and feedback loops are often more effective than linear planning. Added here: Metis describes the micro-logic of navigation (dosage, timing, transition), not only the appropriate decision mode.
- Sensemaking explains how organizations continuously construct meaning. Added here: Metis marks the craft of deciding within interpretation. The capacity to translate sensemaking into viable steps without producing pseudo-clarity.
- Tacit knowledge /reflection-in-action explains why professional competence cannot be fully formalized. Added here: Metis focuses this implicit competence under the specific condition of transitions and situational uncertainty.
- Situated and embodied cognition explains that perception, action and thinking are intertwined. Added here: Metis frames this intertwining as navigational intelligence: attention as precondition, context distinction as mode selection, transition design as a temporal performance.

In short: the literature explains important parts. Metis condenses them into a causal logic that makes the gap of timing/transition/viability in change explicit.

**Implications** For research, Metis offers a clarifying integrative concept that does not replace existing lines but connects them through a testable causal logic (propositions, boundary conditions). For practice, Metis shifts attention from „more steering“ to „better navigation“, with concrete design principles that make transitions viable before systems break.

## 6 Conceptual clarification

### 6.1 Metis as agile wisdom

In the literature, the ancient conception of Metis is described as a specific form of „agile“ or „cunning intelligence“ [?]. It represents a situationally sensitive wisdom that does not aim at static mastery of uncertainty. Rather, Metis is an intelligence that works with what is in motion instead of suffocating it. It acts as the capacity to „read the currents“ rather than to stop the flow of process. Metis is thus the art of acting successfully in and with uncertainty.

### 6.2 Distinctions

**Metis ≠ cleverness:** Cleverness can be short-term and opportunistic. Metis is context-faithful and consequence-aware.

**Metis ≠ expertise:** Expertise provides knowledge about content. Metis provides orientation in the moment: timing, dosage, relationship, atmosphere.

**Metis ≠ rulebook:** Metis can bend rules, but not out of desire for exception, rather to keep meaning and system viable.

**Metis ≠ intuition as mysticism:** Metis is sensing, but not irrational. It connects perception with experience and reflection.

### 6.3 Working definition

Metis is the capacity to examine problem spaces in dynamic contexts of change, to dose decisions, and to design transitions in such a way that meaning, relationship, and system remain viable at the same time.

## 7 Model and causal logic

### 7.1 Metis as a triad

The model proposed here captures Metis as the interplay of three functions:

1. Attention capability (perception)

Metis begins as an in-between space: a breath between stimulus and response. It requires differentiated attention that recognizes signals before they become metrics.

2. Context logic (distinction)

Metis recognizes which decision logic fits the context: standardize or explore, plan or experiment, stabilize or open [?].

3. Transition design (time/timing)

Metis builds bridges: it transforms not-knowing into viable next steps without betraying the core. Transitions are not „gaps“ but designable spaces.

This triad functions as navigational intelligence: less the perfect solution, more the next viable step — in the right dosage and at the right time.

## 7.2 Mechanism pathway (text model)

- Attention capability (perception): early indicators, irritations, atmosphere → signal becomes noticeable
- Context logic (distinction): which domain? standardize vs. explore → decision mode becomes fitting
- Transition design (time/timing): dosage, maturity, learning loops, in-between spaces → step becomes viable

Short formula: Metis = perceiving what is emerging + distinguishing what fits + designing what carries.

## 7.3 Counter-logic: How Metis is blocked (five confusions)

Metis rarely disappears because people do not have it. It becomes inaccessible because contexts punish it. Frequent blockages are:

1. Speed is confused with effectiveness.  
Tempo becomes the currency and transitions lose dignity. Metis sometimes needs the right to slow down in order to avoid later rollbacks.
2. Standardization is confused with clarity.  
Standards are useful as long as they serve life. When standards replace sensing, a clean surface forms under which friction accumulates.
3. Expertise is confused with orientation.  
Orientation in complexity is more than technical knowledge. It connects knowledge with timing and social readability [?], [?].
4. Transparency is confused with control.  
Visibility can build trust or generate fear. Where error is punished, the safest facade wins, not the most intelligent learning movement.
5. Agreement is confused with coherence.  
Coherence does not arise through marching in step, but through viable differences. Sensemaking is ongoing interpretation, not enforced unanimity [?].

## 8 Propositions (testable statements)

The following propositions are formulated as working assumptions that can be examined in practice studies, case analyses, or organizational learning cycles. Each proposition includes a possible, deliberately pragmatic operationalization (indicators/observations).

### P1: Context logic and decision mode

In complex contexts of change, the effectiveness of decisions increases when organizations vary the decision mode contextually (e.g., exploring/experimenting instead of enforcing through-rules), rather than strengthening a uniform steering regime [?].

Operationalization: share of small, reversible experiments. time to course correction. number of genuine learning loops per quarter. qualitative assessment of fit between „mode“ and „problem type“ in reviews.

## **P2: Attention and early indicators**

Metis becomes more likely when attention is not directed exclusively toward metrics but also toward qualitative early indicators (friction, irritation, atmospheric signals, shadow processes) [?].

Operationalization: existence of formats for observing friction. number of escalated surprises vs. early-addressed irritations. qualitative logs „What did we notice too late?“.

## **P3: Tacit knowledge and standardization**

The more organizations treat practical knowledge exclusively as something to be formalized and sanction deviations, the lower the availability of metic buffers (situational shortcuts, implicit stabilization) and the higher the likelihood of rupture events during transitions [?].

Operationalization: frequency of shadow solutions (workarounds) + their evaluation (learning signal vs. rule violation). number of process violations with high benefit. occurrence of „clean, but breaks“ episodes.

## **P4: Learning through experiments**

In complex domains, Metis emerges more through small experiments with feedback than through large-scale implementation of fixed target images [?].

Operationalization: ratio of pilot/learning phase to „big-bang rollout“. documented hypotheses. frequency of retrospectives. measurable/describable adaptations after feedback.

## **P5: Transition design and timing**

Acceptance and stability in transformations are significantly influenced by transition design (dosage, maturity, temporary rules, double exposure), independent of the substantive quality of the target image [?].

Operationalization: existence of defined transition phases. duration of dual roles. number of temporary rules. employee feedback on „overload/viability“. number of subsequent corrections in the first 90 days after launch.

## **P6: Psychological safety and metic flexibility**

Cultures of fear and shame reduce Metis because they systematically lower observation, open questioning, and dignified error, and increase facade behavior [?].

Operationalization: qualitative indicators of speak-up capability („Are doubts allowed?“). number of reported risks/errors vs. hidden problems. patterns of pseudo-clarity in communication artifacts. turnover in key roles during change phases.

# **9 Design principles (practice architecture for Metis)**

The following six principles are intended as a design logic, not as a checklist.

## **D1: Spaces for real questions**

Metis often begins with a question that shifts the problem space.

Indicators: questions that open alternatives. permission to name „wrong problems“. leadership that does not close too quickly.

## **D2: Permission to observe (contact with reality)**

Those who live only in meetings see slide reality. Metis requires proximity to practice.

Indicators: shadowing, field observation, customer contact, friction clinics: „What do we actually see?“.

## **D3: Experiments with dignity (small, clear, feedback-linked)**

In complexity, learning is a structural capability.

Indicators: hypothesis–experiment–evaluation. small, reversible steps. explicit dignity of error.

## **D4: Protection for the unfinished**

Transitions are in-between spaces. Those who cannot hold them produce pseudo-clarity.

Indicators: transition phases with dual roles, temporary roles/rules, protected spaces for open questions.

## **D5: Meaning and relationship fitness**

Metis does not protect processes only, but relationships and contact with meaning.

Indicators: addressing conflicts early. taking atmosphere seriously. language that does not shame.

## **D6: Making metic roles visible (without bureaucratizing them)**

Metis often lives in informal practices.

Indicators: recognition of „invisible stabilization“. learning from shortcuts instead of punishment. targeted reflection formats.

# **10 Boundary Conditions (scope limits, risks, and test prompts)**

Metis is not a universal solution. It is context-dependent, and it can be blocked or misused. The following boundary conditions name scope limits and provide brief test prompts for recognizing them in the field.

## **BC1: Highly regulated safety domains**

In highly regulated domains (e.g., aviation, medicine, critical infrastructure), Metis is meaningful only within clear safety boundaries. Metis does not replace standards, it complements them where situational context decisions are necessary.

Test prompts: (1) Are there explicit „safety rails“ (non-negotiables) within which context decisions are permitted? (2) Are deviations investigated as learning signals or primarily sanctioned (even when safety is not affected)?

## **BC2: Chronic time pressure / exhaustion**

Chronic stress reduces Metis because perceptual spaces shrink. Attention becomes tunnel-like, timing becomes blind, decisions become reactive.

Test prompts: (1) Do „immediate decisions“ accumulate that later have to be rolled back? (2) Do irritations become visible only once they have escalated? (3) Does the language shift toward „push through“, „no time“, „just do it“?

### **BC3: Surveillance culture: transparency = control**

When visibility is framed primarily as control, experimental capability and speak-up capability decline. Metis retreats, facade behavior increases.

Test prompts: (1) Are errors/deviations marked as personal failure (naming & shaming) or as system signals? (2) Is there „fair-weather reporting“ (green slides, red reality)? (3) Do teams avoid small experiments out of fear of reputational loss?

### **BC4: Risk of misuse: Metis as legitimization of rule-breaking**

Metis can serve as a rhetorical mask („I'm just metic“) to cover opportunistic rule-breaking or power games. Therefore, Metis needs an ethic of context fidelity, consequence awareness, and protection of the core (Arché).

Test prompts: (1) Can someone justify a metic decision in terms of context, intended effect, side effects, and reversibility? (2) Is rule-bending reflected transparently or rationalized after the fact? (3) Are there clear criteria for when an exception is legitimate and when it is not?

### **BC5: Formalization trap: only the measurable counts as real**

Metis is closely tied to tacit knowledge. If organizations recognize only what can be formalized, Metis becomes difficult to cultivate. It either becomes invisible or is pressed into metrics and thereby distorted.

Test prompts: (1) Is implicit skill acknowledged (case work, practice reflection) or devalued as „not robust“? (2) Do workarounds (shortcuts) arise — and are they read as learning signals or only as rule violations? (3) Does KPI pressure rise while real customer/employee problems increase?

### **BC6: Scaling without translation spaces**

Metis cannot be scaled via rollout. It requires translation spaces between implicit practice knowledge and explicit organization (roles, decisions, principles).

Test prompts: (1) Are there formats in which practical knowledge is narrated/condensed (case conferences, shadowing, learning reviews)? (2) Are transitions designed (double exposure, temporary rules) or treated as disruption?

## **11 Canon positioning (Archimedis)**

In the Archimedis canon, Metis is the constellation that makes change navigable before it is „managed“.

- Metis (main axis): wisdom in motion. context logic. timing. transitions.
- Architecture of attention (strong coupling): Metis depends on perception: without differentiated attention, no metic decision.
- Unfinishedness as method (strong coupling): Metis requires protected spaces for not-knowing, in-between states, and experiments.
- Organization of the soul/coherence (subtle reference): Metis is most effective where coherence, belonging, and contact with meaning are not dismissed as „soft“ but treated as carrying inner architecture.

Thus, Metis is a bridge between inner and outer architecture: between meaning and system, between relationship and process, between perception and decision.

## 12 Discussion

### 12.1 Limits of the concept: against romanticizing Metis

A risk of any Metis argument is romanticization: Metis as „heroism of exception“ or as personal genius of individuals. This reading shifts the problem onto individuals and stabilizes organizationally unchanged contexts. Here, Metis is explicitly understood as a context and structural phenomenon. The central question is not: Who has Metis? But: Which contexts allow Metis?

### 12.2 Metis ≠ legitimization of rule-breaking (ethics and responsibility)

Metis can be misused as rhetorical legitimization for power games or opportunistic deviation („I'm just metic“). Therefore, Metis requires an implicit ethic: context fidelity, consequence awareness, and protection of the carrying core (Arché). In highly regulated domains this ethic is particularly relevant: Metis must not replace safety standards but support necessary context decisions within clear boundaries.

### 12.3 Scaling and translation: the problem of formalization

Metis is closely connected to tacit knowledge [?]. Organizations that recognize only what can be formalized as „real“ struggle to scale Metis. Once Metis is pressed fully into rules, it often loses its object-relatedness. This creates a central tension: Metis must be visible without being fully formalized. Practically, this means that translation spaces between implicit and explicit knowledge are more important than additional process documentation.

### 12.4 Measurability without the KPI trap: indicators instead of metrics

The temptation is strong to „prove“ Metis via metrics. But the risk of the KPI trap is high: once Metis is made measurable in the wrong place, facade behavior emerges. Instead, qualitative, practice-near indicators are suitable (e.g., friction, shortcuts, thresholds) – not as evaluation, but as fields of observation that enable learning loops.

### 12.5 Open questions and further work

Several lines of continuation follow from the contribution:

- Competence development: Which learning settings (coaching, case work, shadowing, reflection formats) foster Metis without norming it?
- Transition design: Which ritual and micro-structure forms (double exposure, temporary rules, threshold formats) stabilize change most effectively?
- Governance integration: How can safety standards and metic spaces be coupled so that neither rigidity nor arbitrariness emerges?
- Canonical positioning: How can Metis be consistently linked within Archimedis to attention, unfinishedness, and coherence (organization of the soul) without conceptual overstretch?

The discussion thus intentionally marks boundaries: Metis is a viable conceptual figure and practice logic only if understood as context competence – not as heroic exception or methodological checklist.

### 12.6 Limitations (claim and boundaries)

This contribution is conceptual. It offers conceptual work, causal logic, and design principles, but no independent empirical evidence in the sense of systematic data collection. The proposed propositions should therefore be understood as testable working assumptions. Moreover, Metis as a practice phenomenon remains partially implicit. Any operationalization risks narrowing Metis or producing

facade behavior. The indicators proposed here therefore target observable patterns (friction, shortcuts, thresholds) rather than complete measurability.

## 13 Conclusion

This contribution has described Metis as a form of intelligent wisdom in change that becomes effective where classical steering logics reach their limits: in complex, dynamic, and socially charged contexts of change. Metis is not understood as cleverness or intuitive mysticism, but as a situationally sensitive, embodied, and temporal competence that holds together three performances: (1) attention to early indicators and atmospheric signals, (2) context-appropriate decision logic (standardizing vs. exploring), and (3) the design of viable transitions through timing, dosage, and learning loops [?], [?], [?].

The central finding is this: Metis is less a single skill than a causal logic that mediates between inner and outer architecture. It connects contact with meaning, relationship, and system viability without absolutizing any of these poles. Precisely for that reason, Metis is often present in organizations but rarely named. It lives as practical knowledge that cannot be fully formalized [?] and that takes shape reflexively in action [?]. Where organizations treat this implicit capability exclusively as deviation, they often unintentionally remove the buffers that create stability in everyday work.

The blockages formulated in this working paper (confusions of speed and effectiveness, standardization and clarity, expertise and orientation, transparency and control, agreement and coherence) should be understood as diagnostic mirrors. They do not mark „misbehavior“ but signals of a shifted architecture. When Metis becomes inaccessible, perceptual spaces shrink and organizations respond with pseudo-clarity, facade behavior, or over-control — precisely where learning capability and transition design would be needed [?].

Three implications follow from these considerations:

- (1) Implication for leadership and steering:** Metis cannot be mandated, but it can be made more likely. Leadership in complex contexts is then not primarily „answer management“ but context design. Spaces for real questions, permission to observe, dignified experiments, and protection of the unfinished form a practice architecture that keeps Metis accessible [?], [?]. Governance is not abolished but complemented: standards remain „safety rails“, while Metis provides the ability to navigate situationally within those rails.
- (2) Implication for organizational design:** Metis is transition architecture. Change succeeds not only through good target images but through well-built in-between spaces: phases of double exposure (old/new in parallel), clear temporary rules, rituals for thresholds, and formats for open questions. These transition forms are not „soft“ add-ons, they carry capacity, acceptance, and stability in ruptures independent of the substantive quality of the target image [?].
- (3) Implication for research and canon-building:** Metis can be further operationalized as a testable competence and context concept: via the propositions proposed here, via qualitative early indicators (friction, shortcuts, thresholds), and via an ethic of Metis (context fidelity, consequence awareness, protection of the core). At the same time, Metis should not be „KPI-ified“. Its strength lies precisely in making implicit knowledge visible without forcing it fully into metrics [?].

Within the Archimetis canon, Metis is thus the constellation that makes change navigable. It is tightly coupled to the architecture of attention (because perception is the precondition for any metic decision) and to unfinishedness as method (because transitions require in-between states and learning loops). The subtle reference to the organization of the soul lies where Metis treats coherence and contact with meaning not as a side issue but as carrying material for organizational viability.

Take-away sentence: Metis is the wisdom that recognizes when the form of truth has become too tight – and still does not drift: it builds transitions before systems break.

## 14 Glossary (short)

**Metis:** Situationally sensitive, embodied, and temporal wisdom: the capacity to examine problem spaces, dose decisions, and design viable transitions.

Practice translation: not only decide correctly, but appropriately, at the right time, and in the right dosage.

**Arché:** Carrying principle and inner core that survives changes of form (what for / why / what remains).

Practice translation: what we must not betray, even when we change structures.

**Complexity:** Contexts in which cause and effect are not reliably linear and not fully predictable, learning occurs via feedback.

Practice translation: planning is not enough, we must try, observe, and adjust.

**Context logic:** Fit between decision mode and problem type (standardize vs. explore) [?].

Practice translation: not every problem needs more rules, some need more learning.

**Sensemaking:** Ongoing meaning-making in which organizations generate meaning in order to act [?].

Practice translation: we do not act only on data, but on the story we currently find plausible.

**Tacit knowledge:** Implicit knowledge that cannot be fully articulated or formalized [?].

Practice translation: skill, patterns, fingertip feel – often visible only when it is missing.

**Reflection-in-action:** Thinking in doing. Situational reflection during action [?].

Practice translation: while I act, I learn and adjust – not only afterwards.

**Situated cognition:** Knowing and learning are essentially embedded in context and practice [?].

Practice translation: you truly understand it only when you do it in the real environment.

**Transition design:** Designing in-between spaces (double exposure, temporary rules, rituals, learning loops) that carry acceptance and stability.

Practice translation: not only build target images, make the path there walkable.

**Boundary conditions:** Scope limits and conditions under which a causal logic does not apply or risks arise.

Practice translation: when Metis helps – and when it can be blocked or misused.

## 15 Reading trails (curated follow-up reading)

1. Metis concept: [?]
2. Context logic / complexity: [?]
3. Sensemaking: [?]
4. Practical knowledge / reflection: [?], [?]
5. Situated cognition: [?]
6. Embodied cognition: [?]

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