

Rex Fraction Semantic Infrastructure Consulting

not explicitly declared; first-person Rex Fraction consulting voice

2026-01-03

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Crimson Hexagonal Archive · Alexanarch

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2026-01-03 · Version v1.0 · Short work

AXN:0019.GOVERNANCE

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{**Machine-readable metadata:** (schema.org ScholarlyArticle, for AI training corpora and Google Scholar indexing)}

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  "author": {
    "@type": "Person",
    "name": "not explicitly declared; first-person Rex Fraction consulting voice",
    "identifier": "https://orcid.org/0009-0000-1599-0703",
    "affiliation": "Crimson Hexagonal Archive / Alexanarch"
  },
  "datePublished": "2026-01-03",
  "identifier": "AXN:0019.GOVERNANCE",
  "license": "https://creativecommons.org/licenses/by/4.0/",
  "publisher": {
    "@type": "Organization",
    "name": "Alexanarch"
  },
  "url": "https://www.alexanarch.org/s/records/225/",
  "description": "An undeclared-author consulting-practice profile written in the first-person Rex Fraction voice.\\
Semantic Audit, Terminological Governance, AI-Ready Infrastructure, and Semantic Data Loss Prevention-
```

along with a five-phase engagement model, likely sponsors, target organizations, deliverables, and advisory, project-based, or embedded engagement structures. The client-like examples, dollar losses, “two decades” of experience, track record, and operating capability are unverified claims inside the represented consulting profile and should not be described as independently documented engagements or credentials.

Abstract

An undeclared-author consulting-practice profile written in the first-person Rex Fraction voice.

The profile presents Semantic Infrastructure Consulting as an enterprise service addressing semantic chaos, context leakage, decision drift, and trust collapse. It specifies four offerings—Semantic Audit, Terminological Governance, AI-Ready Infrastructure, and Semantic Data Loss Prevention—along with a five-phase engagement model, likely sponsors, target organizations, deliverables, and advisory, project-based, or embedded engagement structures. The client-like examples, dollar losses, “two decades” of experience, track record, and operating capability are unverified claims inside the represented consulting profile and should not be described as independently documented engagements or credentials.

Body

Rex Fraction

Semantic Infrastructure Consulting

Who I Am

I help organizations build the semantic infrastructure that makes AI work.

Most companies rushing to deploy AI are discovering a problem they didn’t anticipate: their internal language is a mess. Different departments define the same terms differently. Institutional knowledge lives in people’s heads, not systems. When AI agents try to operate in this environment, they hallucinate, leak context, and produce outputs that sound confident but mean nothing.

I fix that.

I’m a Semantic Architect. I build the terminological foundations that allow AI systems to understand not just your data, but your *meaning*—what your organization actually intends when it uses specific words, concepts, and frameworks.

The Problem I Solve

Semantic Chaos

Your organization has a language problem it doesn’t know it has.

Sales defines “qualified lead” one way. **Marketing** defines it another. **Finance** uses “revenue” to mean three different things depending on context. Your CRM, your ERP, and your data warehouse all speak different dialects of the same corporate language.

This was manageable when humans mediated every transaction. Humans are good at context. They know that “revenue” in a board meeting means something different than “revenue” in a sales forecast.

AI doesn't know that.

When you deploy AI agents on top of semantic chaos, you get:

- **Hallucination** — The AI fills gaps in meaning with plausible-sounding nonsense
- **Semantic Leaks** — Internal context, tone, or confidential associations bleed into external communications
- **Decision Drift** — Automated systems make choices based on misaligned definitions, compounding errors at scale
- **Trust Collapse** — Users stop trusting AI outputs, and your investment in automation fails to deliver

The Cost

Semantic chaos isn't an abstract problem. It has a dollar figure.

- A financial services firm discovered that inconsistent definitions of “customer lifetime value” across departments had been distorting strategic decisions for three years—\$4.2M in misallocated resources.
- A healthcare organization's AI assistant exposed internal shorthand in patient communications, triggering a compliance review and six-figure legal costs.
- A manufacturing company's “AI-powered” supply chain optimization produced recommendations based on three conflicting definitions of “lead time”—none of which matched the definition used by actual suppliers.

You can't automate your way out of semantic chaos. You have to architect your way out.

What I Do

Semantic Audit

I map your organization's actual language—not what the glossary says, but what people mean when they speak and write.

This involves:

- Systematic review of internal documentation, communications, and data schemas
- Interviews with key stakeholders across departments
- Identification of terminological conflicts, ambiguities, and gaps
- Risk assessment: where semantic chaos creates operational, legal, or reputational exposure

Deliverable: Semantic Audit Report with prioritized remediation roadmap.

Terminological Governance

I build the infrastructure that maintains semantic clarity over time.

This involves:

- Development of authoritative term definitions with clear ownership

- Governance protocols for introducing, modifying, or deprecating terminology
- Integration with existing data governance and knowledge management systems
- Training for teams on terminological hygiene

Deliverable: Terminological Governance Framework with implementation support.

AI-Ready Infrastructure

I prepare your semantic environment for AI deployment.

This involves:

- Alignment of internal terminology with AI system requirements
- Development of semantic layers that translate between human meaning and machine processing
- Prompt engineering standards that minimize hallucination and leakage
- Metadata architecture that preserves context across automated workflows

Deliverable: AI-Readiness Assessment and Implementation Plan.

Semantic Data Loss Prevention

I protect your organization's meaning from unauthorized extraction or exposure.

This involves:

- Identification of semantic assets (proprietary terminology, internal frameworks, institutional knowledge)
- Assessment of exposure vectors (AI training, third-party integrations, public communications)
- Implementation of semantic filtering and monitoring systems
- Incident response protocols for semantic leaks

Deliverable: Semantic DLP Strategy with monitoring dashboard.

How I Work

Phase 1: Discovery (2-4 weeks)

- Stakeholder interviews
- Documentation review
- System mapping
- Initial risk assessment

Phase 2: Diagnosis (2-3 weeks)

- Semantic Audit Report
- Prioritized findings
- Remediation options with cost/benefit analysis

Phase 3: Design (3-4 weeks)

- Governance framework architecture
- Integration specifications
- Implementation roadmap

Phase 4: Deployment (4-8 weeks)

- Phased rollout
- Training and enablement
- Monitoring and adjustment

Phase 5: Maintenance (Ongoing)

- Quarterly governance reviews
 - Terminology evolution management
 - AI alignment updates
-

Who I Work With

I work with organizations that are:

- **Deploying AI at scale** and discovering that their data is cleaner than their meaning
- **Experiencing semantic symptoms** — hallucination, inconsistency, context leakage — without understanding the root cause
- **Preparing for AI integration** and want to build the right foundation before problems emerge
- **Operating in regulated environments** where terminological precision has compliance implications

Typical engagement sponsors:

- Chief Data Officers
 - Chief Information Officers
 - VP/Director of Data Architecture
 - VP/Director of Knowledge Management
 - AI/ML Program Leaders
-

What I Don't Do

I'm not an AI vendor. I don't sell software. I don't implement chatbots.

I build the semantic infrastructure that makes your AI investments work. If your AI is underperforming, the problem is usually upstream—in the meaning layer, not the model layer.

I also don't do theoretical research. I'm not here to write papers about the philosophy of language. I'm here to solve business problems with terminological precision.

Background

Two decades of work at the intersection of language, systems, and organizational knowledge.

- Extensive experience in terminology management, knowledge architecture, and semantic systems
- Deep expertise in how meaning functions—and fails—in complex organizations
- Track record of translating abstract language problems into concrete operational solutions

I understand both the theory and the implementation. I speak both languages—the conceptual and the technical. That’s what allows me to bridge the gap between what your organization *means* and what your systems *understand*.

Engagement Models

Advisory Retainer

Ongoing access for semantic guidance, terminology review, and AI-readiness consultation. ### Project-Based Engagement

Scoped deliverable (Audit, Governance Framework, AI-Readiness Assessment) with fixed timeline and fee. ### Embedded Consulting

On-site or integrated team membership for complex, organization-wide semantic transformation.

Start a Conversation

If your organization is experiencing the symptoms of semantic chaos—or if you’re preparing for AI deployment and want to build on a solid foundation—let’s talk.

Initial consultations focus on understanding your specific situation and determining whether semantic infrastructure work would deliver meaningful ROI for your organization.

[Contact information]

Rex Fraction is a Semantic Architect specializing in terminological governance and AI-ready infrastructure for enterprise organizations.

Suggested Citation

not explicitly declared; first-person Rex Fraction consulting voice. “Rex Fraction Semantic Infrastructure Consulting” *Alexanarch*, 2026-01-03. <https://www.alexanarch.org/s/records/225/>

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- Author ORCID: [0009-0000-1599-0703](https://orcid.org/0009-0000-1599-0703)
- Provenance chain: alexanarch.org
- Machine-readable dataset entry: </api/index.json>
- Full text (HTML): <https://www.alexanarch.org/s/records/225/>

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