

Working Backward: Pattern Analysis When You Have a Suspect

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A Different Starting Point

Your detective just arrested someone for a commercial burglary. During the interview, the suspect made comments suggesting they've done this before. The detective asks: "Can you search for similar cases? I think we might have a series here."

This is fundamentally different from the scenario where you start with a pile of cases looking for connections. When you have a suspect first, you're working backward—from a known behavioral system to potential cases.

Why Linking A Suspect to Additional Cases Matters

Connecting a suspect to additional cases serves multiple operational and justice objectives. For prosecution, it establishes pattern behavior and may provide stronger evidence across multiple incidents. For investigation, it clears cases efficiently and prevents resources from being spent on crimes already solved. For victims and communities, it provides resolution and accurate accounting of criminal activity. For the suspect, resolving multiple cases at once can result in more efficient case disposition. Critically, systematic linkage analysis prevents both over-attribution (clearing cases that don't actually fit the suspect's behavioral system) and under-attribution (missing cases that do fit). The goal isn't simply to maximize the number of cases linked—it's to accurately identify which crimes this specific offender committed based on behavioral evidence to be followed up with investigation. This requires the same analytical rigor as any pattern analysis, with the added burden of countering confirmation bias when you already have a suspect in custody.

This guide introduces the analytical framework for suspect-based pattern identification.

The Core Challenge

When you start with cases and look for patterns, you're being eliminative—narrowing down possibilities. When you start with a suspect, you're being generative—expanding outward to find what might fit.

The cognitive frameworks remain the same, but you apply them in reverse order.

The Reverse Framework: Ontological → Typological → Taxonomic

1. ONTOLOGICAL ANALYSIS: Map the Suspect's Behavioral System

What you're doing: Understanding the complete behavioral system this suspect demonstrates, not just in the arrest case but in how they operate as an offender.

Start with what you know:

- What does this suspect's arrest case tell you about their complete MO?
- How did they select this target?
- What was their approach and entry method?
- How did they behave on scene?
- What did they take and why those items?
- How did they exit and dispose of property?
- What does this reveal about their skill level, resources, and constraints?

Critical questions:

- What elements appear to be consistent behavioral choices vs. situational adaptations?
- What does their behavior reveal about their knowledge, planning, and risk tolerance?
- What opportunity structures did they exploit?
- What geographic knowledge does their behavior demonstrate?

Key insight: You're building a behavioral model of this specific offender—their system in action. This becomes your search template.

The goal: Develop a clear picture of how this person operates as an offender before you start searching for other cases.

2. TYPOLOGICAL ANALYSIS: Identify Searchable Behavioral Signatures

What you're doing: Translating the behavioral system into specific, searchable elements that could identify similar cases in your data.

Convert the system into search criteria:

- What specific behaviors are distinctive enough to search for?
- Which elements are likely to be consistent across multiple incidents?
- What combinations of behaviors would indicate this same system?

Example from the arrest case:

If the suspect's behavioral system shows:

- Targets small retail businesses in strip malls
- Always enters through rear service doors during early morning hours (3-5 AM)
- Takes cash registers but leaves merchandise
- Shows knowledge of alarm response times
- Exits through the same entry point

Searchable typological elements:

- Small retail burglaries (not big box stores)
- Forced rear service doors
- Cash registers taken, merchandise left behind
- 3-5 AM timeframe
- Strip mall locations

Key insight: Not every element of the behavioral system is equally searchable or equally distinctive. Focus on the elements that are both findable in your data and characteristic of this suspect's approach.

The limitation: You'll find cases that share some typological similarities, but not all will be from your suspect.

3. TAXONOMIC ANALYSIS: Search and Eliminate

What you're doing: Systematically searching your data for cases matching the typological criteria, then eliminating those that don't fit the suspect's behavioral system.

The search process:

- Start with broad taxonomic categories (commercial burglaries, timeframe, geography)
- Apply typological filters (rear door entry, cash registers taken, etc.)
- Generate a candidate list of potentially related cases

The elimination process:

This is where you return to ontological thinking. For each candidate case, ask:

- Does this case demonstrate the same behavioral system?
- Are the similarities true behavioral signatures or coincidental?
- Where this case differs from the arrest case, does the variation make sense within the suspect's behavioral system?

Example: Your search returns 15 commercial burglaries with similar characteristics. Ontological analysis of these cases reveals:

- 8 cases show the complete behavioral system with minor situational variations
- 4 cases share some elements but show a different underlying system (likely different offender)
- 3 cases initially seemed similar but detailed analysis shows fundamental differences in how the offender operates

Validation Through Behavioral Coherence

Testing your analysis:

For cases you believe are linked to your suspect:

- Can you explain variations between cases based on situational factors while maintaining behavioral consistency?
- Do the geographic patterns make sense given what you know about this suspect?
- Does the temporal evolution of cases show learning/adaptation or fundamental system changes?
- Are there cases that should fit but don't? Why might that be?

Red flags that you're over-attributing:

- You're forcing cases to fit by ignoring significant behavioral differences
- You're relying on vague similarities ("both involved burglary") rather than specific behavioral signatures
- You can't explain why certain elements changed between cases
- The geographic or temporal patterns don't make practical sense

Common Pitfalls in Suspect-Based Analysis

Confirmation Bias Trap: Once you have a suspect, your brain wants to find cases for them. You start seeing similarities everywhere.

Counter-strategy: Deliberately look for cases that seem similar but probably aren't. Practice explaining why they don't fit.

The "Close Enough" Trap: You find cases with some similarities and decide that's good enough.

Counter-strategy: Hold yourself to the same standard as the arrest case. Would you have linked these cases to each other if you didn't have a suspect?

The Expansion Trap: You start with commercial burglaries but then expand to residential burglaries, then to thefts, then to...

Counter-strategy: If you need to expand crime types, return to ontological analysis. Does the suspect's behavioral system actually work across these different crime types, or are you just casting a wider net?

A Practical Example: Working All Three Frameworks

Your Situation: Suspect arrested for commercial burglary of a pharmacy. Detective thinks there's a series.

STEP 1: Ontological Analysis (Map the System)

From the arrest case, you identify the suspect's behavioral system:

- Targets pharmacies in standalone buildings with poor visibility from main roads
- Enters through roof access (cutting through roofing material)
- Takes specific prescription medications (controlled substances with street value)
- Shows knowledge of pharmacy layout and drug storage locations
- Very brief time on scene (under 5 minutes)
- Demonstrates prior planning and surveillance

Behavioral insights:

- This person has specific knowledge (pharmaceutical, construction)
- They prioritize speed and specific high-value items over opportunity
- Geographic selection shows pre-planning, not random opportunity
- Entry method requires tools and physical capability

STEP 2: Typological Analysis (Identify Search Criteria)

Primary search elements:

- Pharmacy burglaries
- Roof entry (or attempted roof entry)
- Controlled substances taken
- Standalone pharmacy buildings
- Brief time on scene

Secondary indicators:

- Poor visibility locations
- Limited geography (demonstrates local knowledge)
- Similar timeframe for incidents

STEP 3: Taxonomic Analysis (Search and Eliminate)

Initial search: 45 pharmacy-related incidents in last 12 months

First elimination (taxonomic): Remove robberies, grab-and-runs, prescription fraud **Result:** 23 burglaries remain

Second elimination (typological): Apply primary search elements **Result:** 8 cases with roof entry and controlled substances taken

Third elimination (ontological): Detailed behavioral system analysis

- Case 1-4: All elements of behavioral system present, minor situational variations explainable
- Case 5-6: Similar entry but different on-scene behavior, different property selection pattern
- Case 7-8: Right property taken but entry method shows different skill set/knowledge

Final assessment: 4 cases likely linked to suspect (Cases 1-4), 4 cases probably different offenders

Integration with Investigative Needs

For Prosecution:

- You've identified 4 cases with strong behavioral linkage
- You can articulate the specific behavioral signatures connecting them
- You can explain why other similar cases don't fit

For Investigation:

- The behavioral system helps investigators understand what evidence to look for
- Geographic analysis of the 4 linked cases might reveal the suspect's anchor point
- Property disposal patterns might help locate fenced merchandise

For Prevention:

- Understanding this suspect's target selection helps identify other vulnerable locations
- The behavioral system reveals what security measures would actually deter this approach

Documentation Standards

When you present suspect-based pattern analysis, document:

Your ontological foundation: "Based on the arrest case, the suspect's behavioral system demonstrates..."

Your typological criteria: "I searched for cases showing these specific behavioral signatures..."

Your taxonomic process: "From [X] initial cases, I systematically eliminated those that didn't fit because..."

Your validation: "Cases [list] show consistent behavioral systems with explainable variations. Cases [list] share some elements but demonstrate different underlying systems."

Supervisor Questions You Should Be Able to Answer

- "How did you identify what to search for?"

- "Why these cases and not these other similar cases?"
- "How do you know these variations are the same offender adapting vs. different offenders?"
- "What would make you change your assessment?"

The Critical Difference

Pattern analysis starting with cases asks: "Which of these cases are linked?"

Pattern analysis starting with a suspect asks: "Which cases demonstrate this suspect's behavioral system?"

Same frameworks, different application. Both require systematic methodology, not just similarity matching.

Quick Reference: Suspect-Based Analysis Checklist

□ ONTOLOGICAL FOUNDATION

- Have I mapped the complete behavioral system from the arrest case?
- Do I understand the relationships between all elements?
- Can I distinguish consistent behavioral choices from situational adaptations?
- Does this system reveal specific knowledge, skills, or resources?

□ TYPOLOGICAL TRANSLATION

- Have I identified the distinctive behavioral signatures?
- Are these signatures searchable in my data systems?
- Have I prioritized signatures by both distinctiveness and searchability?
- Have I identified which combinations of elements would indicate this system?

□ TAXONOMIC SEARCH

- Have I systematically searched appropriate crime categories?
- Have I applied typological filters appropriately?
- Have I generated a manageable candidate list?
- Have I documented my search methodology?

□ VALIDATION

- For each candidate case, have I assessed behavioral system coherence?
- Can I explain variations while maintaining system consistency?
- Have I eliminated cases that share some but not all elements?
- Can I articulate why certain similar cases don't fit?

□ DOCUMENTATION

- Can I defend my methodology to prosecutors, supervisors, and peers?
- Have I documented both inclusions and exclusions?
- Can another analyst understand and replicate my reasoning?

Where This Connects to Pattern Recognition From Cases

These two approaches—starting with cases vs. starting with suspects—represent different analytical paths to the same goal: understanding behavioral systems and identifying linked incidents.

Pattern analysis from cases (taxonomic → typological → ontological):

- Starts broad, narrows down
- Eliminative process
- Discovers patterns in data

Pattern analysis from suspects (ontological → typological → taxonomic):

- Starts specific, expands outward
- Generative then eliminative
- Applies known patterns to data

Master both approaches, because real crime analysis requires moving flexibly between them.

The Bottom Line

Having a suspect doesn't make pattern analysis easier—it just changes where you start. You still need:

1. **Ontological analysis** to understand the behavioral system
2. **Typological analysis** to translate that system into searchable elements
3. **Taxonomic analysis** to systematically search and eliminate

When you can articulate the complete behavioral system and explain how candidate cases either fit or don't fit that system, you're doing rigorous suspect-based analysis.

Stop saying "we arrested someone for burglary, so I searched for similar burglaries." Start saying "I analyzed the suspect's behavioral system and searched for cases demonstrating that system."

That's the difference between searching for similarities and conducting systematic behavioral analysis.

About This Guide

This guide introduces the analytical framework for suspect-based pattern identification. It's a companion to "A Practical Guide to Pattern Recognition in Crime Analysis: Taxonomic, Typological, and Ontological Thinking," which addresses pattern analysis starting with cases rather than suspects.

For comprehensive coverage of behavioral variables and crime-specific patterns, see *Elements of Crime Patterns: A Foundation for Theory and Practice* (April 2026, Routledge).

Questions or feedback? Connect on LinkedIn and share how you're applying these frameworks in your work.

"Working backward from a suspect still requires working forward through systematic analysis."