

# HEAVY Testing

*What (Skilled) Testers Are Turning Into*

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# What is “meta-testing?”

- A. Theoretical
- B. Self-Referential
- C. Practical

# What is “meta-testing?”

- A. study of ontological/epistemic foundations of testing
- B. testing of a testing process
- C. creating or improving testing w/o necessarily testing

**Test management**  
(without test managers)

# What happened to test managers?



# Trend: Test Management Collapse

1. **Management abdicated stewardship of craftsmanship in testing.** The ISTQB has successfully lowered expectations for testing expertise, with its stupid “certifications” and bogus “standards.” **Test managers failed to build credibility with the development community.**
2. **Lean/Agile then destroyed test management.** In that environment of happily shallow testers, the Lean/Agile movement arose and challenged the need for testing groups. **Test groups folded into dev groups with managers getting axed.**
3. **Testing craftsmanship lost its support base.** Without a robust test management community, software testing craftsmanship no longer had a natural home. **In many places, the culture dominating testing is not business culture but rather “maker” culture.** What do makers want to do? Build robots to do testing! (Because building is more fun than testing, for them; anyway, it’s what they know.)
4. **“Testers” became tool jockeys or developer assistants.** Many of those shallow tester took one selenium class and became shallow automation tenders. **So, how does anyone become good at deep testing?**
5. **These testers are perpetually over-stressed.** Testing are now driven by task cards, one after another, with little time to reflect. A creative activity has become “taskified.” Test data and infrastructure preparation suffer; **testing, in many teams, is permanently shallow.**

# What happened to test managers?

## The Trees That Miss The Mammoths

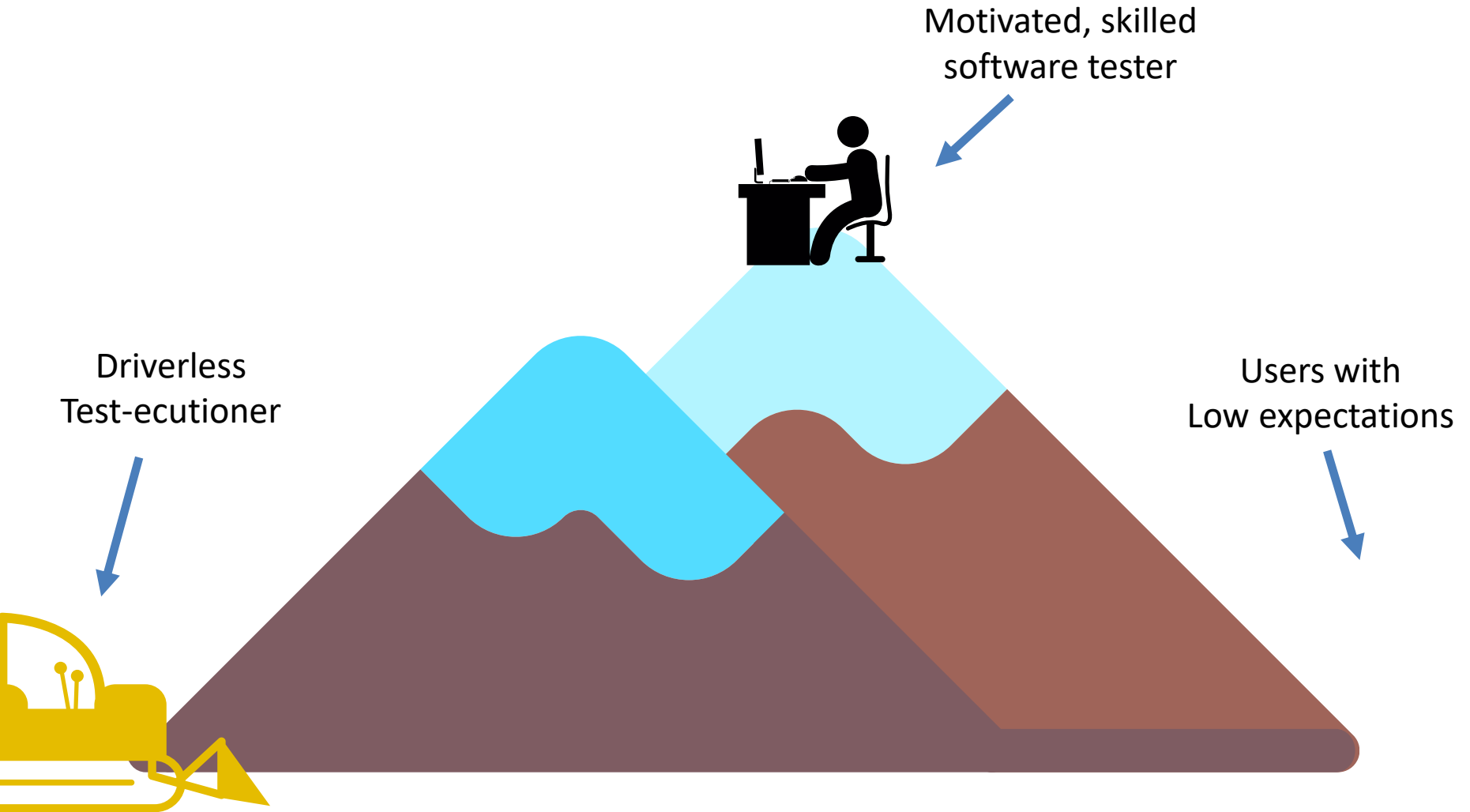
Trees that once depended on animals like the woolly mammoth for survival have managed to adapt and survive in the modern world.

By Whit Bronaugh



Like test managers, mammoths disappeared for complicated reasons, and the ecosystem suffers for it.

# Meanwhile, demand for skilled testing is eroding.



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under assault by shiny automation on one side,  
and low quality standards on the other.



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The entire industry has become enthralled by  
the values and practices appropriate for  
experimental, non-critical software.  
Meanwhile, testing culture, already weakened  
by the ISTQB zombie virus, is stagnating.



# What must good testers do?

- A. Good testing.
- B. A lot of meta-testing.

It seems good testers  
must become  
good meta-testers.

# Activities of Meta-Testing

- **Yourself**
  - Developing your professional mentality
  - Developing your testing methodology
  - Developing yourself as a coach and trainer
  - Building credibility so you will be heard
  - Developing yourself as a meta-tester (that's meta-meta-testing!)
- **Your Project**
  - Advocating for responsible risk taking
  - Advocating for testing (and knocking down harmful testing myths)
  - Advocating for testing role
  - Advocating for testability
  - Negotiating scope and mission of testing
  - Moderating testing load by controlling the pace of development
  - Acquiring time, information, and other resources needed for good testing
  - Nurturing the relationship between development and testing (social distance vs. critical distance)
  - Evaluating the need for testing– and knowing when to stop
  - Assessing the status and quality of testing (via interview, observation, audit testing, escaped bug review)
  - Communicating test results and discussing implications for product risk
- **Other People Who Test**
  - Recruiting people to test (including volunteers and part-timers)
  - Advocating for reasonable developer-level testing and build checking.
  - Fostering diversity of temperament, skills, and methods in the testing process
  - Setting reasonable expectations for testers and the test process
  - Fostering powerful and clear ways to explain and discuss testing
  - Teaching people to test faster, more thoroughly, or both
  - Organizing test events (i.e. “bug hunts” “testing days”)
  - Observing and interviewing people about their testing
  - Supporting people as they are testing (e.g. providing tools, data, environment support, record keeping)
  - Fostering lean, helpful documentation
  - Creating better tools for testers to use; automating the simpler checks

# Activities of Meta-Testing

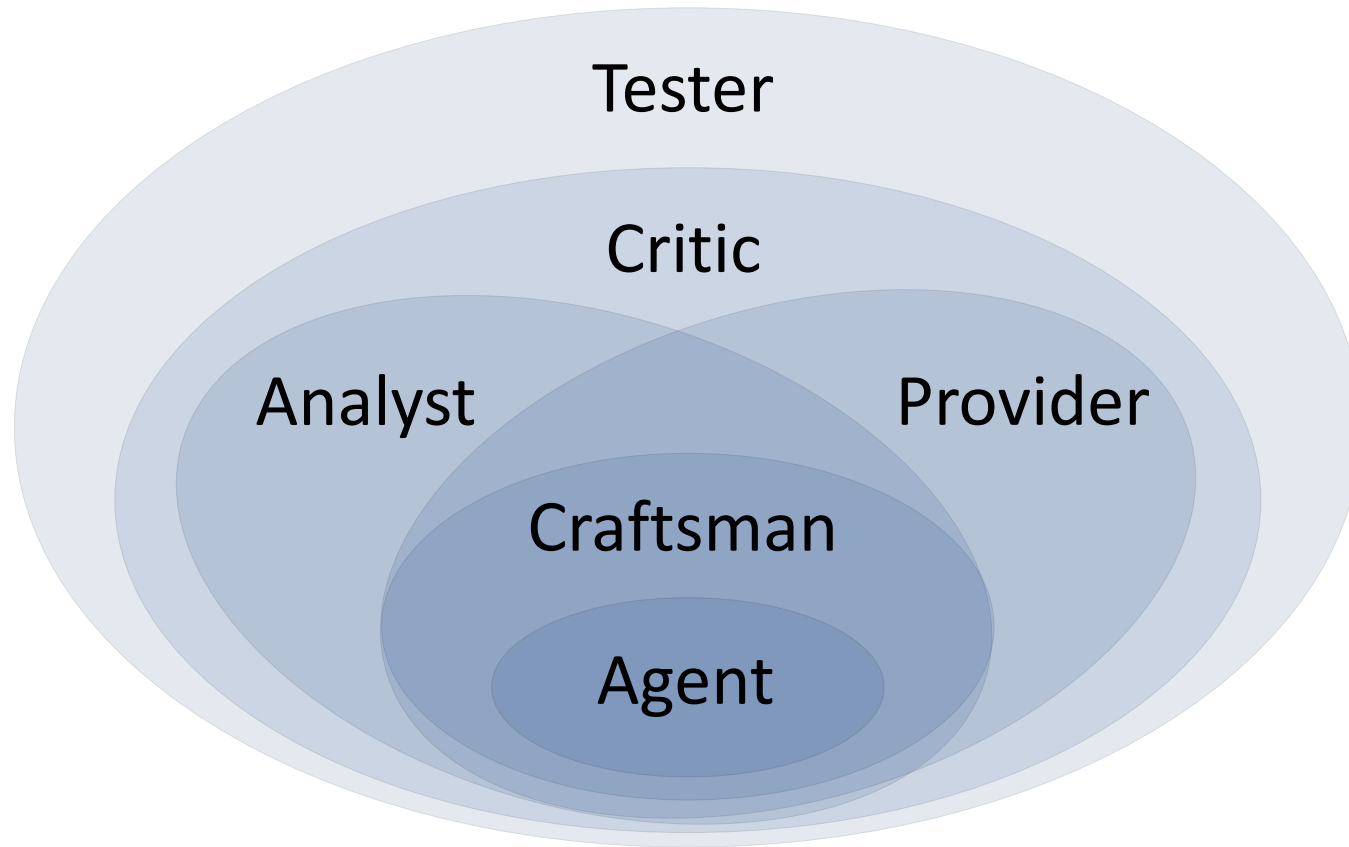
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# Six Mentalities of Testing



Each of these mentalities is a independent way of thinking to some degree, but the outer ones depend on the foundation provided by the inner ones.

# Six Mentalities of Testing

The agent mentality is about being an adult; taking control of your own choices and actions, and taking responsibility for your decisions. You avoid being objectified, commodified, or victimized— but when that happens you take action to regain agency. All the other mentalities depend on agency.

**Agent**

“I make choices for myself.  
I am accountable for my choices.”

# Six Mentalities of Testing

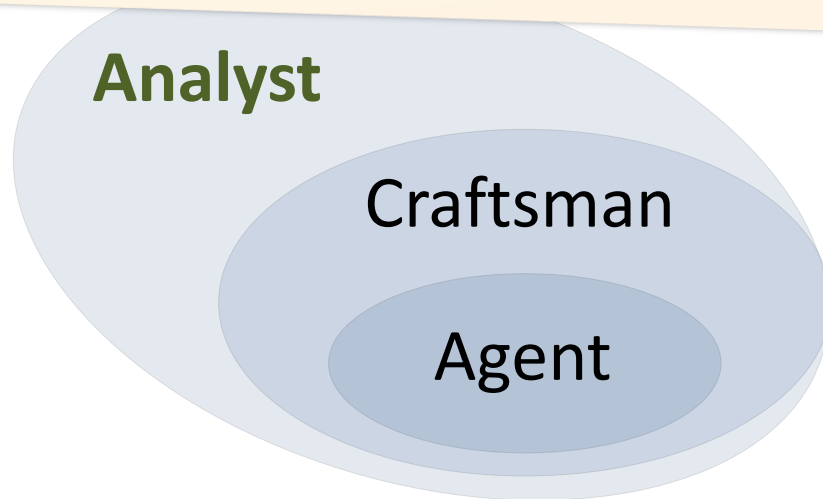
The craftsman mentality is about assuring the quality of your own work; seeking to be ever better at whatever you choose to do with your life. Craftsmanship means taking the time and energy to study your craft, whatever that is. And when your work is not good enough, it means you make it right.



"I take pride in my work.  
I strive to be better in my work."

## of Testing

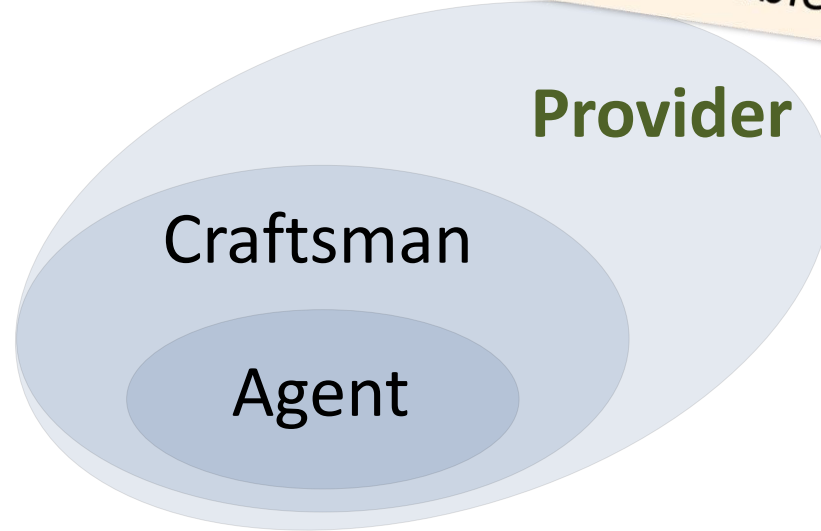
The analyst mentality includes the skills and attitudes of studying complex things, modeling them, and applying those models. It requires the courage to deal with things that are confusing and poorly explained. It requires curiosity. It involves the design and application of heuristic problem-solving methods.



"I study the world and figure it out."

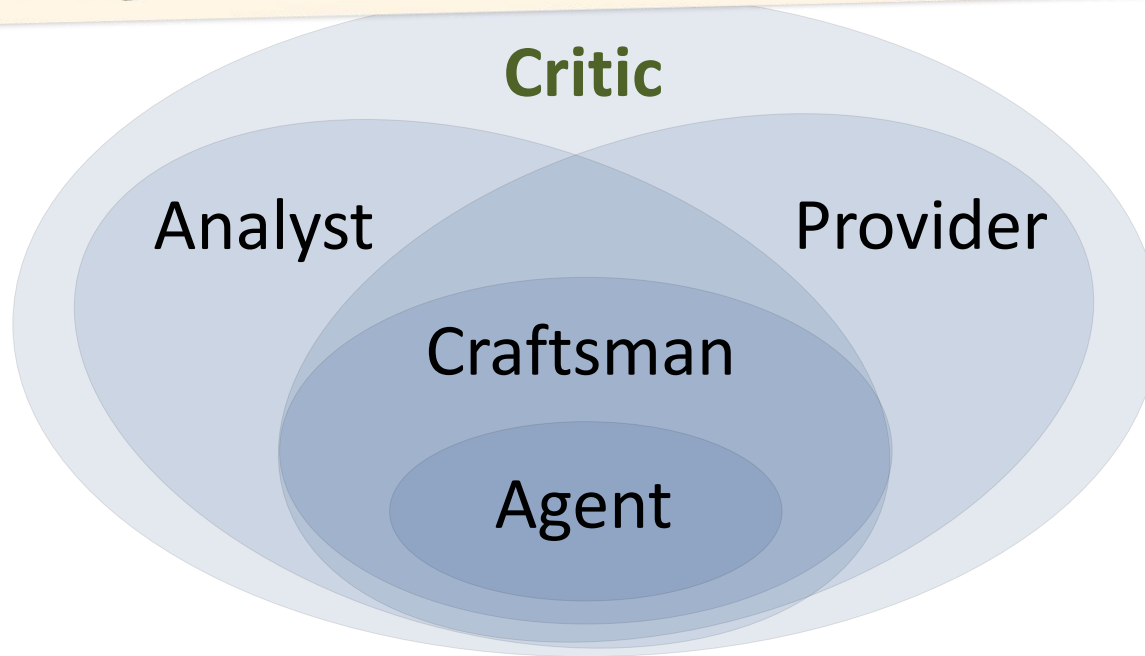
## Testing

**S** The service provider mentality is about being useful to others. It's about being able to do a job for money, deliver the goods, and get along with people while you do so. There are different ways to succeed as a provider, including being especially sociable or especially reliable.



“I serve; I support; I provide.”

The critic mentality includes the skills and attitudes of thinking critically and scientifically. It's the art of productively complaining. It's the habit of questioning safe assumptions. It requires faith that there are problems here even if you haven't yet found them. You can't be a good tester if you are a poor critic.



“I will find trouble wherever I look!”

# Six Mentalities of Testing

## Tester

The tester mentality adds all the nuts and bolts of designing specific tests for your specific product. It includes how to operate your product, how to use tools, wrangling of test data, configuring test environments, and all that nitty gritty.

“I evaluate the product so my client can make good decisions about it.”

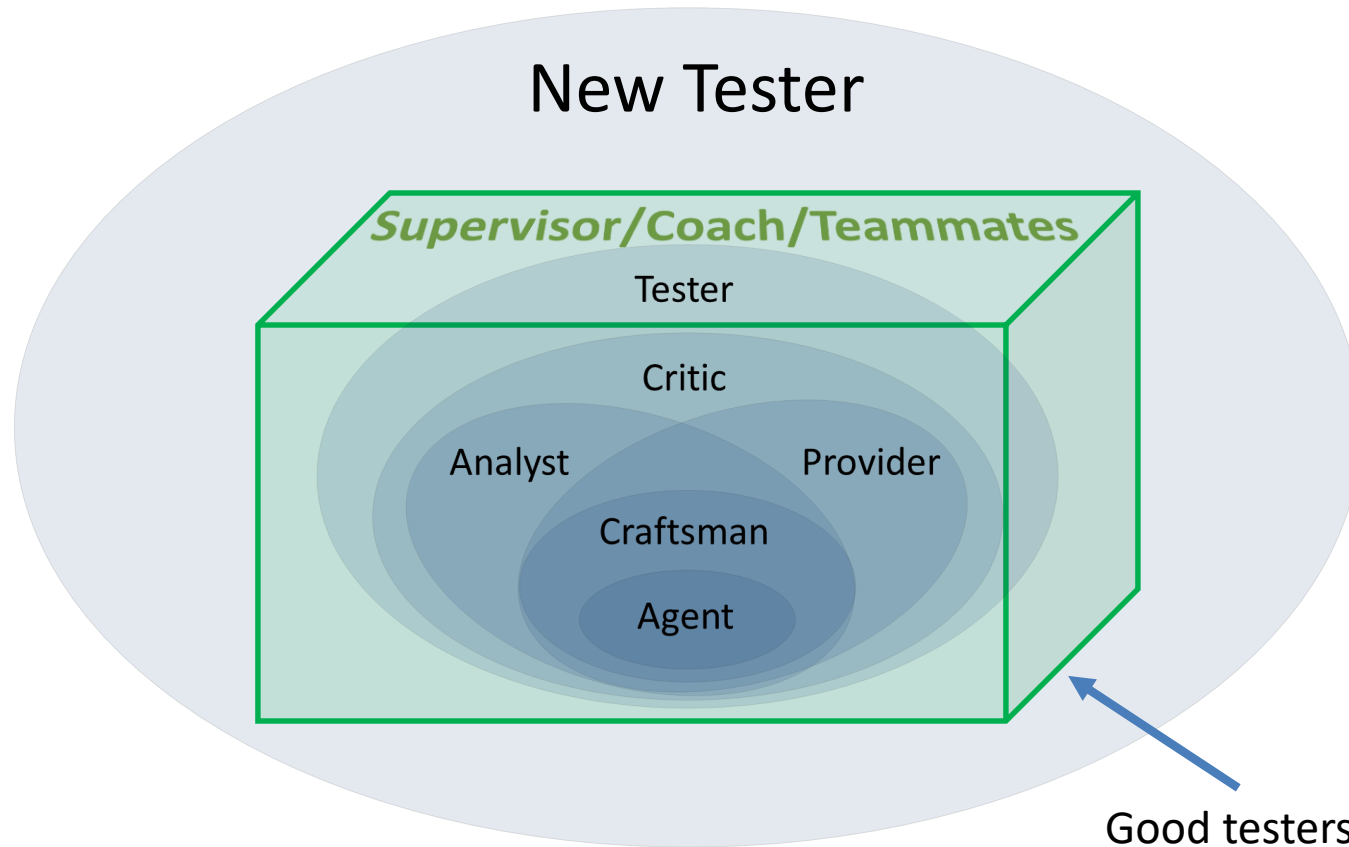
# The One Mentality of New Tester

New Tester

I guess I'll muddle through  
and look for bugs?

“Please don't fire me.”

# The One Mentality of New Tester



*“Please don’t fire me,  
I learn fast.”*

Good testers become that way most rapidly when properly supervised, coached, and trained. It is a lengthy growth process, not about following scripts.

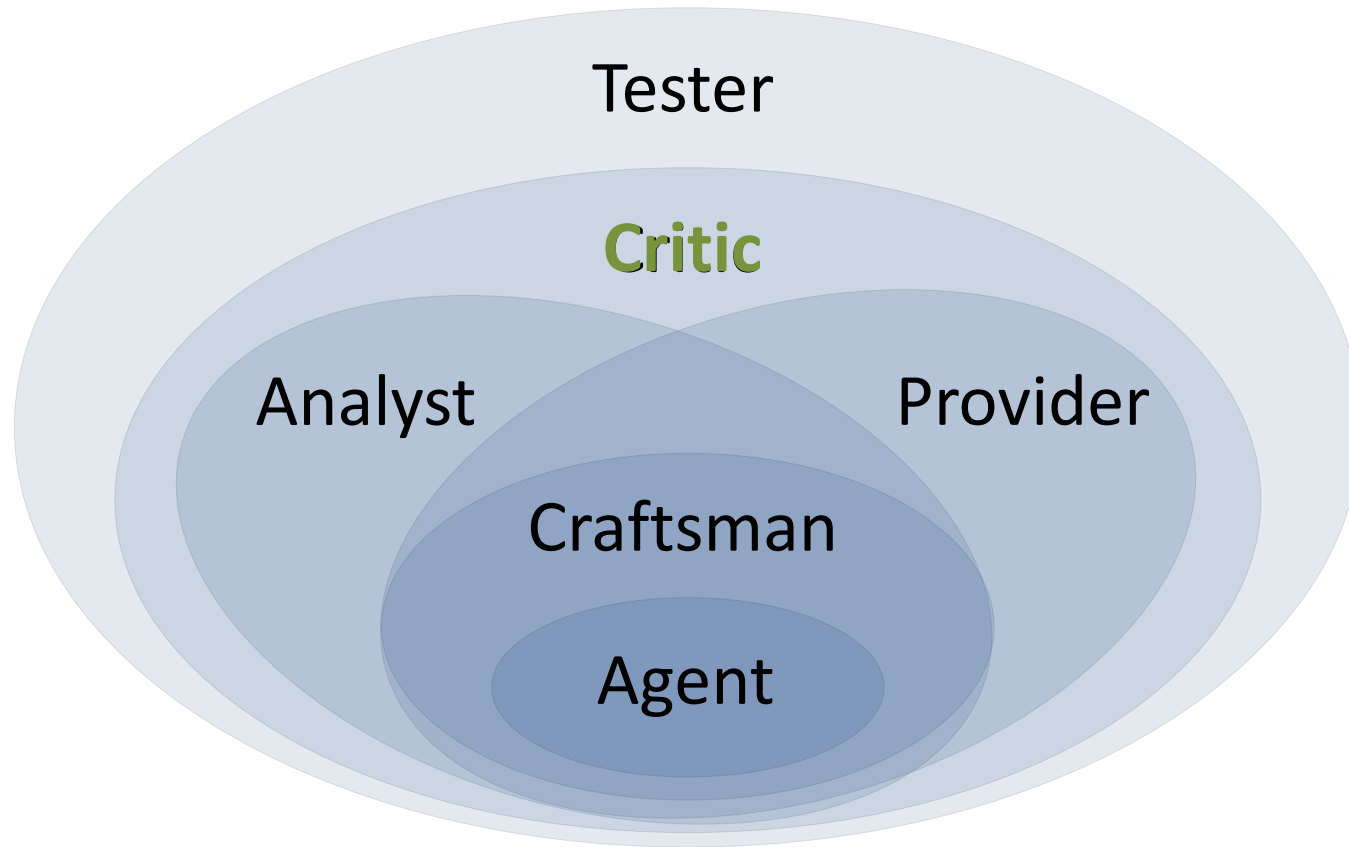
# The One Mentality of Fake Testing

Fake Tester

Push buttons. Check output.  
Follow scripts. Tick boxes. Move cards.  
Don't ask why, just obey.

“Don't fire me,  
I am ISTQB certified.”

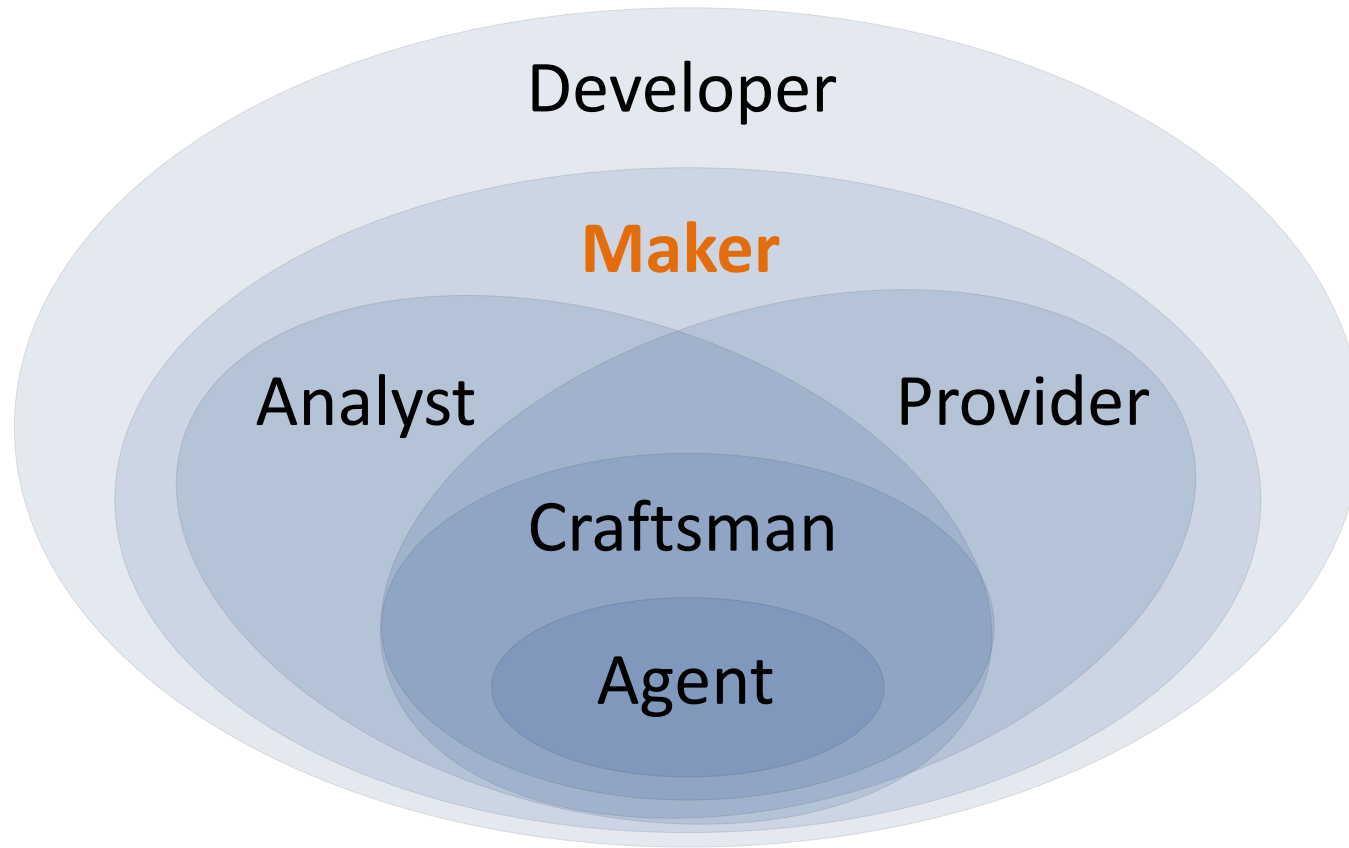
# Six Mentalities of Testing



*“I will find trouble wherever I look!”*

The developer mentality has much in common with that of a tester...  
but there is one huge difference.

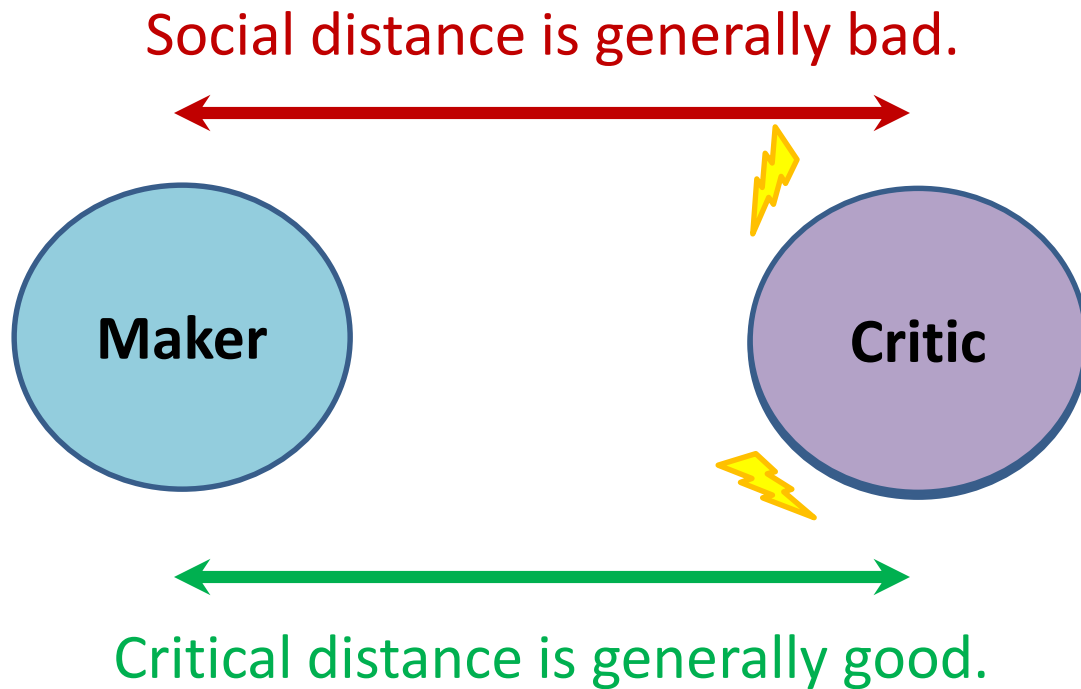
# Six Mentalities of Development



“I invent things that end your troubles!”

# Critical Distance and Social Distance

## *A Creative Tension*



# Whither the Testing Role?

The **testing specialist role**  
is a **heuristic**  
for **developing, operating, and expressing**  
**good testing mentality** across the organization.

(Because complicated things don't just happen unless someone commits to it.)

# Elements of Role

<http://bit.ly/2c062wN>

## **Scope** (what the role covers)

- Responsibilities
- What depends on it
- What it depends on

## **Power** (what the role influences)

- Authority/Sponsorship
- What roles control it
- What roles it controls

## **Value** (what the role does for people)

- Specific problems solved
- Necessity to organization
- Desirability to others
- Prestige for actor

## **Cost** (what the role takes from people)

- Cost of the actor, equipment, and materials
- Cost to accommodate the role
- Cost due to other roles becoming complacent

## **Requirements** (what role/actor needs)

- Environment & tools
- Skills & knowledge
- Motivation
- Outside support

## **Openness** (how actors relate to it)

- Ownership & commitment
- Casual shareability
- Informality
- Interruptability
- Simplicity
- Legibility

## **Presence** (when & where it operates)

- Persistence
- Responsiveness
- Disruptiveness

## Dimensions Of Role

## Expectations Of Actors

## **Commitment** (acceptance of duty)

- Investment of energy
- Accountability

## **Competence** (ability to perform)

- Study and practice
- Self-evaluation

## **Readiness** (operational status)

- Anticipating events
- Adapting to new conditions
- Maintaining efficiency
- Troubleshooting

## **Coordination** (relating to other roles)

- Mission negotiation
- Resource negotiation
- Helping and accepting help
- Respecting agreements
- Failover strategy
- Status reporting
- Delivery

# Why do some people think a role is a prison or a fortress?

This happens when role is defined as the **only things you do** and what **no one else does**.



# I like to think of roles this way.

A role is like a villa. It is a semi-private space. Someone dwells in it. Someone is responsible. But visitors may come and help.

- Devs help testers.
- Testers help devs.
- But testers are **ACCOUNTABLE** for test process.

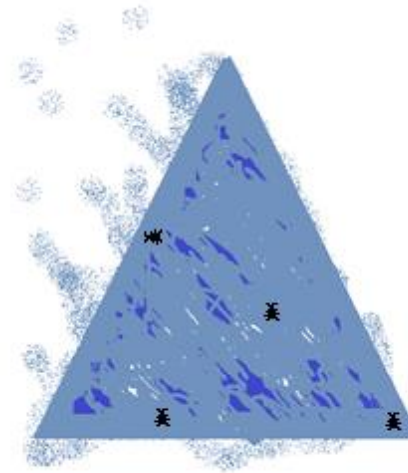


# People can help us without taking over our role.

Testing Role: a commitment to do testing (well).



Person doing....



...testing.

A person performing the role of tester.

# So, maybe this is your context...

**No one else cares about testing.**

**You care  
about  
testing!**



# Or this...

**Everyone else cares about  
“testing” which is not really testing.**

**You care  
about  
testing!**

# I hope this is the one.

**Everybody cares about testing  
but they are really busy and need help  
to do it well and make it better.**

**You care  
about  
testing!**

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- Advocating
- Negotiating
- Moderating
- Acquiring
- Nurturing
- Evaluating
- Assessing
- Communicating

- **Other People**

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Testers are turning  
into meta-testers.  
(or else...)