

HELLO

my name is

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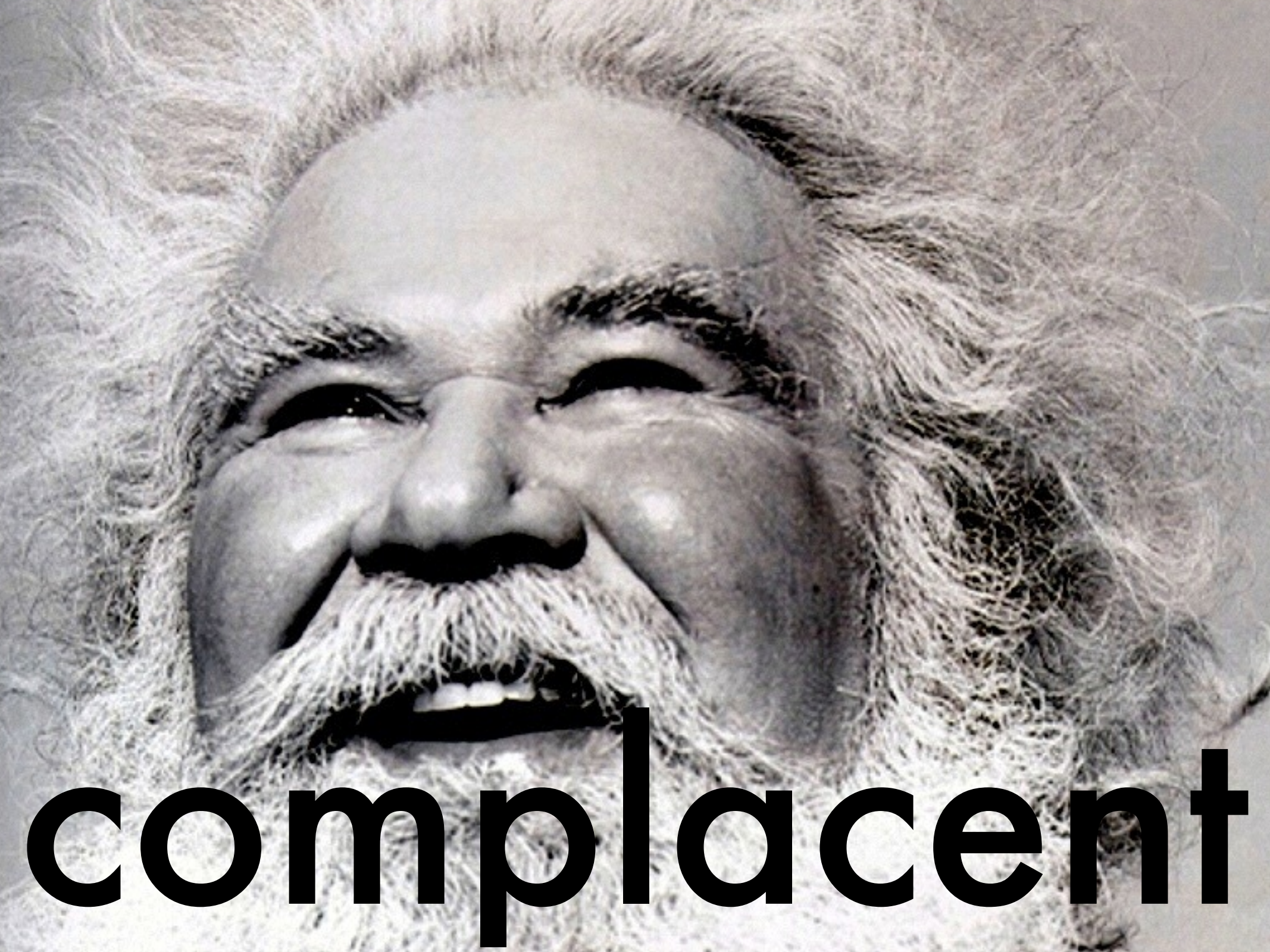
@LukeGWilliams | @NYUinnovation



weather

Antique
Canadian Communication
Device \$20

ited in Italy



complacent

incremental





corner

that most successful companies will face eventually. It's lucid, analytical—and scary.”

—Andrew S. Grove, chairman & CEO
Intel Corporation

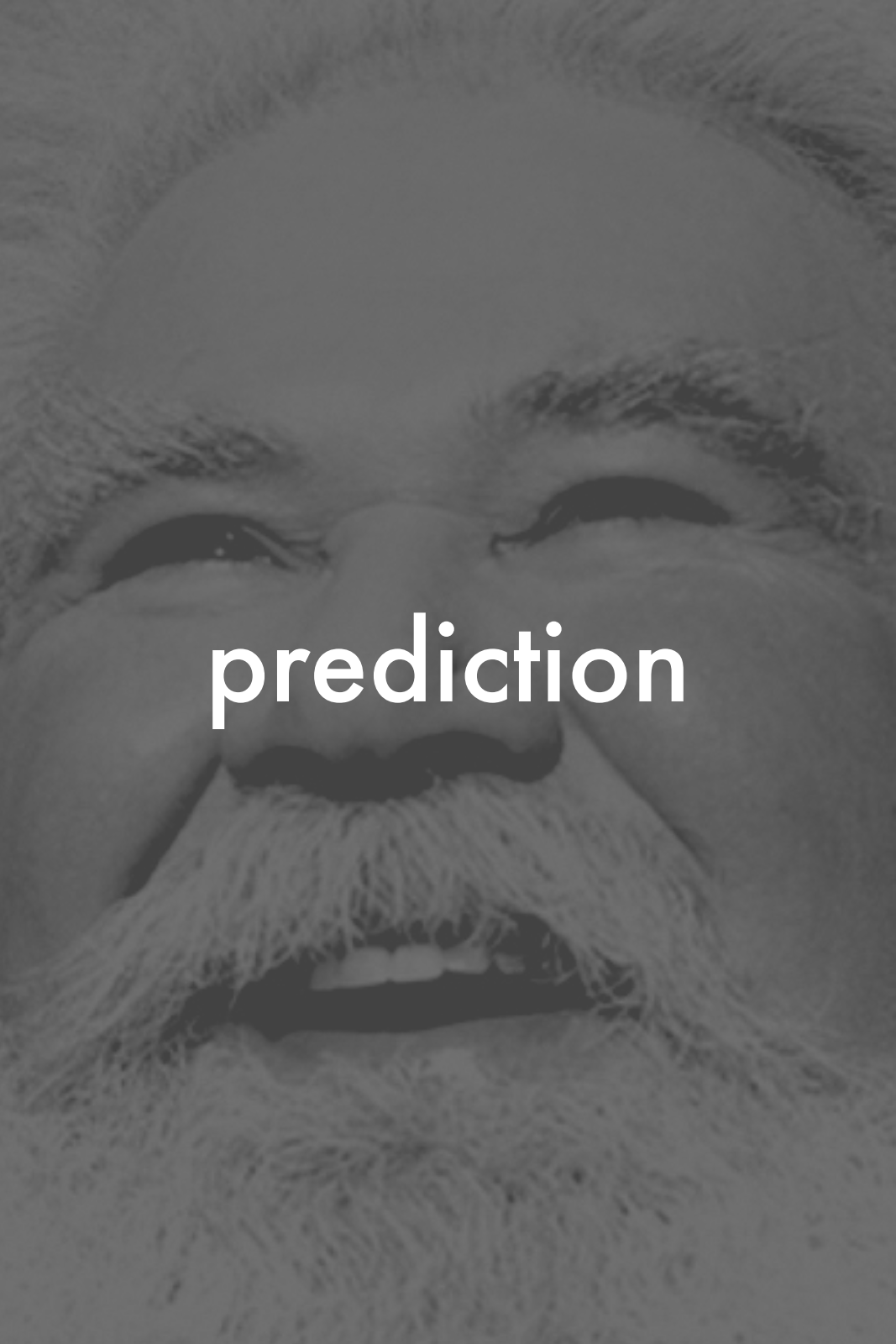
THE INNOVATOR'S DILEMMA



spot & react

BE





prediction



provocation

Disruptive Thinking—

1. List industry **cliches (status quo).**
2. Craft disruptive **hypotheses.**
3. Generate **observations & insights.**
4. Define a market **opportunity.**

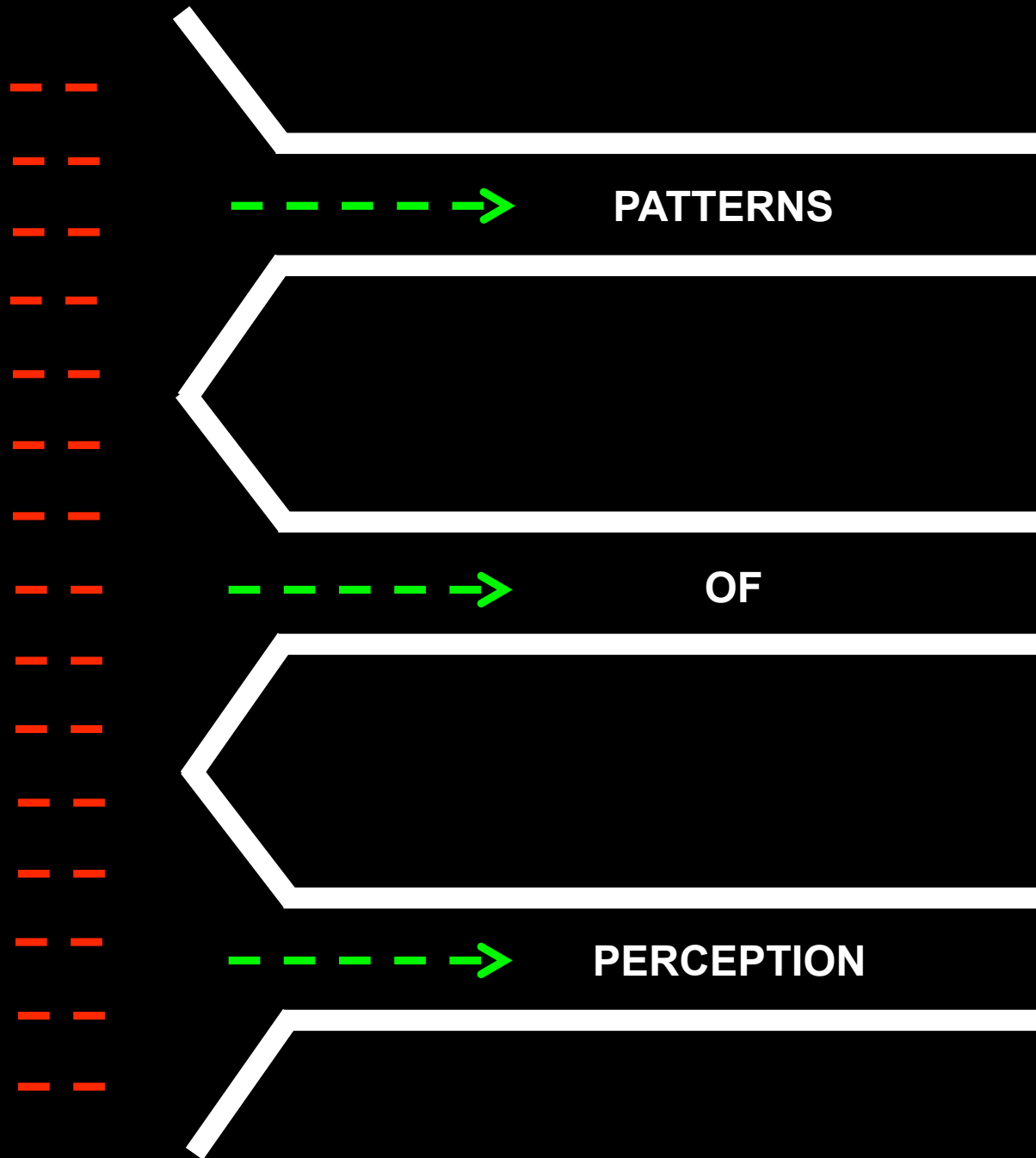
Surfacing the Clichés—

Clichés—

The widespread beliefs that govern the way people think about and do business in a particular space.

“A surplus of similar companies, employing similar people, with similar educational backgrounds, coming up with similar ideas, producing similar things, with similar prices and similar quality.”

— Jonas Ridderstrale and Kjell Nordström, *Funky Business*



Audit—

Start by getting online and identifying a **handful of direct competitors** in the industry, segment, or category you're focused on.

- **Group together** those with similar characteristics (such as size and resources), strengths (such as brand name, distribution), and strategies (such as high quality).
- **Select one or two competitors in each group** that are pretty representative of the group as a whole. A total of five or six competitors are the ideal number to work with.

- Do research on each competitor and **make a list of the clichés** that keep everyone doing the same thing, competing the same way, or operating with the same set of assumptions.
- The quickest and most efficient way to do this is to **explore company websites, examine their advertising, and read what people are saying** about the companies and their products on blogs and other social media platforms (such as Twitter, Facebook, and Amazon).

- Make your research efforts as **experiential** as possible — order one of a company's products online or sign up for their service.
- If they have a brick-and-mortar presence, **sample those products or services** in person.
- Keep your research activities quick and informal, **intuitive and qualitative**.
- List **any clichés** you think are relevant.

But to keep you from drowning in a sea of information, consider using the following **three filters**:



What Are The

Interaction Clichés?

Example: Rental Car

Face-to-face interaction with a service agent,
completing a lot of paperwork,
and renting vehicles by the day.



What Are The

Product Clichés?

Example: Soft-drink

Soda is inexpensive,

it tastes sweet,

and it's advertised as aspirational.



What Are The

Price Clickés?

Example: Apparel

Socks are packaged, priced and purchased in pairs.



Crafting a Disruptive Hypothesis—

A hypothesis is a

reasonable

prediction

A disruptive hypothesis is an

unreasonable

provocation

In 1981, **Doug Lenat** entered the...

Traveller Trillion Credit Squadron Tournament





What if...

We send a thousand

defenseless & immobile

ships into battle?

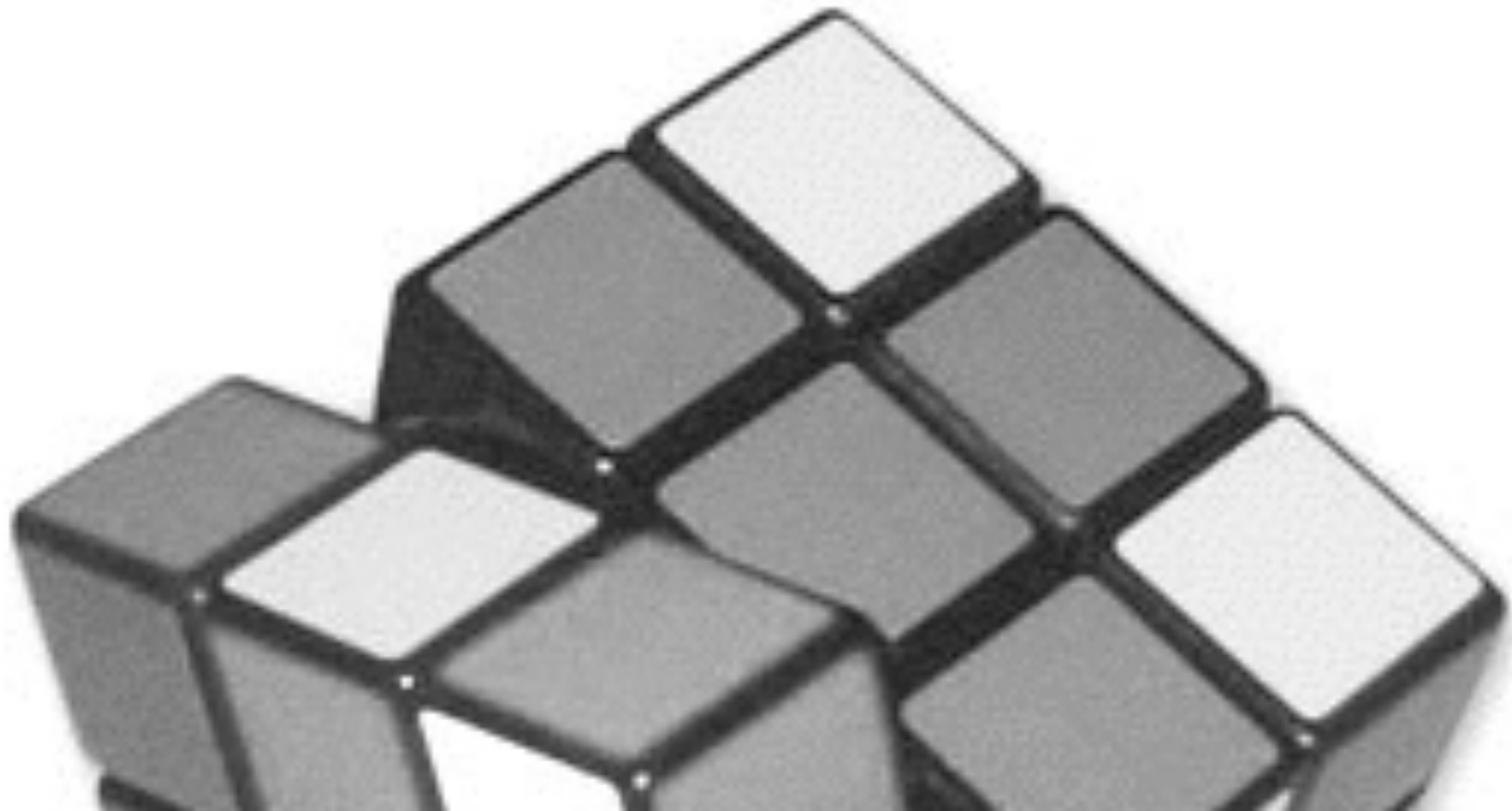
"Agility."

What if...

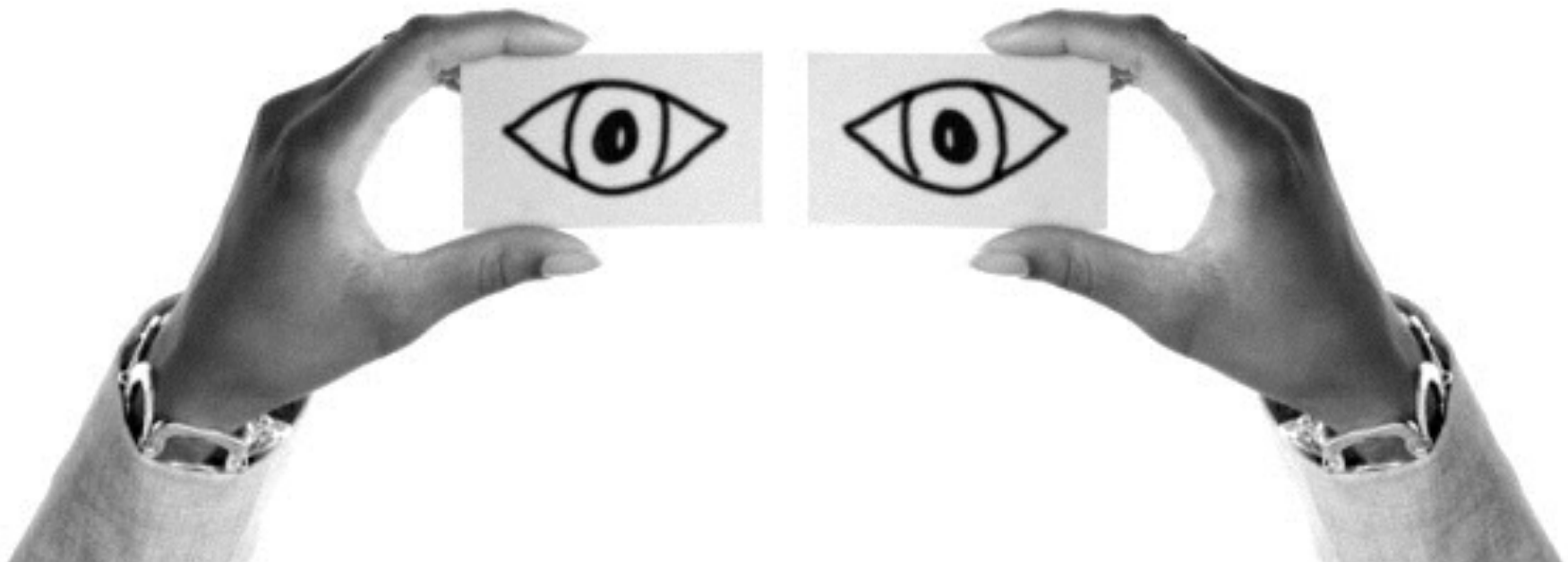
We sink our own ships

the moment they get damaged?

Take the clichés and twist them like a **Rubik's cube** and look at them from the inside out, upside down, backward, and forward.



You're trying to find a way to **rearrange the pieces**, which in turn will provoke a different way of looking at the situation.



Specifically, you're looking for something (or things) that you could:

- **scale up or scale down,**
- **move in the opposite direction,**
- **or completely do without.**

What Can You **Invert?**

The tide of terror that swept America IS HERE



THE SHINING_x

A STANLEY KUBRICK FILM STARRING JACK NICHOLSON SHELLEY DUVALL "THE SHINING" WITH SCATMAN CROTHERS DANNY LLOYD
BASED ON THE NOVEL BY STEPHEN KING SCREENPLAY BY STANLEY KUBRICK & DIANE JOHNSON PRODUCED AND DIRECTED BY STANLEY KUBRICK EXECUTIVE PRODUCER IAN LADLAN PHOTOGRAPHED IN ASSOCIATION WITH PRODUCTIONS CIRCLE CO.



CLICHÉS

Inexpensive

Tastes good

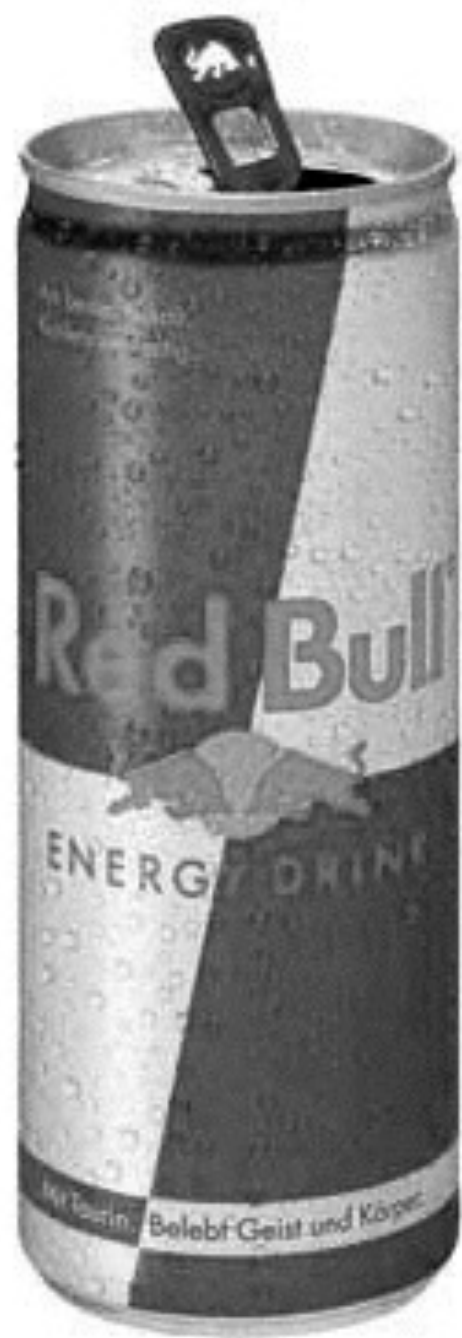
Aspirational

HYPOTHESIS

Expensive

Tastes bad

Functional



What Can You **Deny?**

CLICHÉS

See customer

Complete paperwork

Cars by the day

HYPOTHESIS

Don't see customer

Skip paperwork

No cars by the day



What Can You Scale?

CLICHÉ

socks are sold in
pairs

HYPOTHESIS

socks are sold in sets
of three



Exercise—

DISRUPTIVE HYPOTHESES: focus _____ group _____

CLICHÉS

INTERACTION

EXAMPLE: Restaurants provide customers with a menu when they arrive

PRICE

EXAMPLE: Customers pay for food and service

PRODUCT

EXAMPLE: Restaurants offer a 3-course meal

HYPOTHESES

INVERT

EXAMPLE: What if a restaurant provided customers with a menu only when they leave?

DENY

EXAMPLE: What if customers were not charged for food and service?

SCALE

EXAMPLE: What if a restaurant offered a 30-course meal?

Step 1: List Cliches

(Left-hand side of the worksheet)

Step 2: Create Disruptive Hypotheses

(Right-hand side of the worksheet)

What Are The
Clichés?

CLICHÉ AUDIT: focus _____ group _____

CLICHÉS

INTERACTION

EXAMPLE: Restaurants provide customers with a menu when they arrive

Restaurants provide customers with a menu when they arrive



PRICE

EXAMPLE: Customers pay for food and service

Customers pay for food and service



PRODUCT

EXAMPLE: Restaurants offer a 3-course meal

Restaurants offer a 3-course meal



What Are The

Hypotheses?

DISRUPTIVE HYPOTHESES: focus _____ group _____

HYPOTHESES

INVERT

EXAMPLE: What if a restaurant provided customers with a menu only when they leave?

➡ *What if a restaurant provided customers with a menu only when they leave?*

DENY

EXAMPLE: What if customers were not charged for food and service?

➡ *What if customers were not charged for food and service?*

SCALE

EXAMPLE: What if a restaurant offered a 30-course meal?

➡ *What if a restaurant offered a 30-course meal?*

The general rule is that the bolder your hypotheses, the fresher the perspective they offer.

So, don't skip this step and don't worry if your "what if's" seem completely ridiculous.

Disruptive Hypotheses to Insights—

**As you proceed through the process,
these hypotheses will help you:**

- **imagine radically new scenarios,**
- **ask unconventional questions,**
- **and discover unexpected advantages.**

Objective:

To find an opportunity to put your hypotheses into action,
by carefully observing your customers and their needs.

To recap

The reason you kick off this process with **disruptive hypotheses** instead of going straight into **contextual research**, is because you must pick apart the existing industry clichés to see things differently.

Provocative **'what if' questions** prepare you to recognize things you didn't notice before and put research observations together in new ways.

Think of it this way

Hypotheses feed *observations*.

Observations feed *insights*.



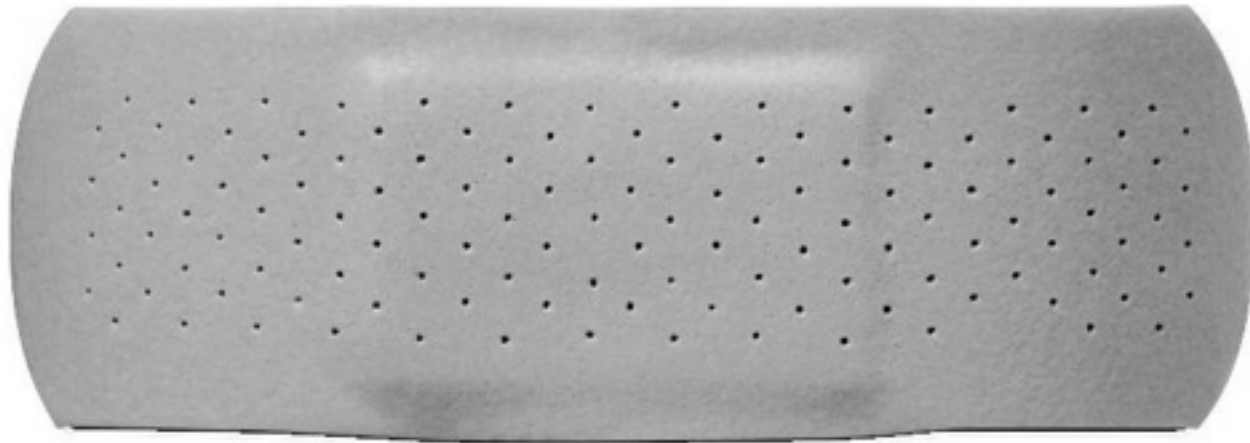
Making
Observations—

What Am I

Looking For?

The most common answer is

“pain points.”



Problems are seductive because
they're usually clear.

The customers' **frustration is visible**
and, even as an outsider, it's easy to empathize.

It's the small,

seemingly unbroken aspects

of a situation that provide the

richest opportunity areas

for innovation.

The most common answer is

~~**“pain points.”**~~



“tension points.”



Types of

Tension

Workarounds

Values

Inertia

Shoulds **versus wants**

Workarounds:

These quick, efficient-seeming solutions address only the most obvious symptoms of a problem, not the underlying problem itself.

Workarounds can actually be dangerous because, when symptoms clear up, people lose any incentive they may have had to deal with the real issues.



Workarounds: Look for...

Keep your eye out for quick and ready fixes that people have created to “work around” less than ideal situations

Values:

People's values play an important role in their motivations. What do they value? What's important to them? What's not?

Tension is often present when a product, service, or experience is in conflict with the values they find desirable.

WIRED

Values: Look for...

Look for high-priority and low-priority values.

Has there been a change in what consumers' value in the products and services they buy?

Has that change revealed a gap between what consumers want and what's actually available?

Inertia:

Generally, the more established people's habits, the higher the inertia, meaning they're less motivated to consider alternative choices.

Wherever customers feel trapped by inertia in a situation they find less than desirable is where you'll find tension.



Inertia: Look for...

Keep an eye out for situations in which customers act out of habit.

Opportunities can be created to either break or leverage that inertia.

Shoulds versus wants:

People often struggle with the tension between wants, which are things they crave in the moment, and shoulds, which are the things they know are good for them in the long term.



Shoulds vs wants: Look for...

Look for the tension that lies between wants and shoulds. Treat all customers as highly invested in moving from where they are to where they want to be.

Do they need help “saving themselves from themselves” to get there?

Tips—

Tips for

Interviews

- Ask open ended questions, or questions that require a longer explanation than one word
- Listen and be attentive, even if taking notes at the same time
- Have a dynamic conversation, don't interview from a script
- Allow long pauses
- Ask naïve questions (even if you're the expert) to hear the explanation in their words
- Don't correct people; understand their perceptions and why they may perceive things differently than you
- Remember: the participant is the expert!

Tips for

Making Observations

During observations, look for:

- Things that prompt shifts in behavior
- Work-arounds and adaptations
- Body Language
- Things people care about
- Anything that surprises you
- Anything that questions your assumptions about how the product or service works
- Anything that you find irrational

Cultivating Insights—

What Are **Insights?**

Observations and insights are not the same thing.

Observations are raw data, the gradual accumulation of research information that you have consciously and carefully recorded – exactly the way you way you saw or heard it, with no interpretation.

Insights are the sudden realizations that happen when you

interpret the observations

and discover

unexpected **patterns.**

Patterns reveal **gaps**

(unmet needs)

between where people are and where they'd ideally like to be

— **between their current reality
and their desires.**

Wherever there's tension
(observation), there's a gap.

If you can spot the gap (insight),
you can fill the void.

Capturing Your
Insights

Describing insights

When capturing and describing insights, the words and phrasing you use matter.

Insights often fly in the face of conventional wisdom or expectations.

When that happens, use a well placed “but” or “whereas” to draw attention to the contradiction and increase the statement’s impact.

For example:

Drivers of high-performance cars are not stressed by high-speed driving *but by parking.*

Men who buy premium audio systems like to display them in their living rooms, *whereas women would rather hide them behind plants or furniture.*

Customers are not as interested in its locks per se *but in the possessions those locks protect.*

Take risks

Be prepared to take risks with your insights.

They don't have to be unmistakably correct; they have to be thought-provoking.

In many research approaches, the pressure to be incontrovertibly right is so strong that there's no space for intuition and intriguing perspectives.

Not ends in themselves

The most important thing to remember is that research insights are not ends in themselves.

You're generating them to feed the opportunities that will put your hypotheses into action.

Describing an
Opportunity—

How Do You Describe An

Opportunity?

There's an opportunity to:

- provide [who?]
- with [what advantage?]
- that [fills what gap?]

Reframing your hypotheses

Remember that all of your research activities are done to drive the discovery of opportunities.

It's possible that your opportunities may deviate from your original hypotheses as you work through this definition process.

So, you might have to abandon or reframe your original hypotheses to sync it with your observations.

Worksheet—

DISRUPTIVE OPPORTUNITY: focus _____ group _____

HYPOTHESIS: What if... ?

WHO

ADVANTAGE

GAP

OPPORTUNITY: There's an opportunity to provide [who?] with [what advantage?] that [fills what gap?]

DISRUPTIVE OPPORTUNITY: focus In-car driving experience group

HYPOTHESIS: What if... ?

What if cars were not for driving?

WHO

ADVANTAGE

GAP

The person driving the car (as opposed to the passengers)

Productivity (i.e., getting more done while spending time in the car)

Productivity features (i.e., phone calls, checking email) that are specifically designed to be used while driving

OPPORTUNITY: There's an opportunity to provide [who?] with [what advantage?] that [fills what gap?]

Help drivers be more productive in a way that's safe and optimized for driving.

Developing a Research Plan—

FOUNDATIONAL

EXPERT ANALYSIS

- Competitive Landscaping
- Trend-scraping
- Subject Matter Expert interviews
- Usage Analysis
- Analogous Experience Analysis
- Immersion Tours

CONTEXTUAL INQUIRY

- Interviews & Observation
- Shadowing / Non-invasive
- Environment Intercepts
- Experience Walkthroughs

SURVEYS

- Web
- Email to Web
- Intercepts

GENERATIVE

DIARIES

- Written
- Photo
- Audio / Video
- Behavioral Sampling

CONTEXTUAL INQUIRY

- Interviews & Observation
- Shadowing / Non-invasive
- Environment Intercepts
- Experience Walkthroughs

CONCEPT STRUCTURING

- Card sorting
- Affinity Mapping
- Moodboarding

PARTICIPATORY DESIGN

- Framework validation
- Co-creation exercises

EVALUATIVE

CONCEPT TESTING

- Lab Setting
- In-context

USABILITY TESTING

- Heuristic Evaluation
- Low-fidelity Prototyping
- Hi-fidelity Prototyping

SURVEYS

- Web
- Email to Web
- Man on the Street

Your research goals

Will be influenced by the provocative hypotheses you created, and you'll want to focus on the relationship between the customer and the industry, segment, or category.

1.



Make a list of questions

Determine the kinds of information you'd like to gather by making a list of questions based on your hypotheses.

- How and where do customers interact with the current products and services in your industry, segment, or category?
- What steps do they have to take to purchase products and services?
- How does the industry, segment, or category make the customer feel?
- What is the social network of the customer?
- Is the customer loyal to an existing product, service, or brand?
- What is the level of customer support offered?

2.



Define the relevant audience

Define the relevant audience: a mix of the target customer population, potential customers, and/or outlier customers.

3.

Work out the **timing** **required.**



Your decision will depend on the size and complexity of your focus, but it should allow for:

- A rapid immersion – 2–3 hours for a quick informal study
- 2–3 days or weeks for more formal research

4.



Interviews & observations

...in the environment where people use the products and services relevant to your situation.

Allow for multiple observation sites so you'll be able to collect rich information across several environments.

Pre-arranged, open-ended interview and observation.

The most common type of study.

While you're asking questions designed to get your interview subjects to speak freely,

you're also carefully observing the environment they live or work in and what they're doing while they're there.

Example: Intuit's "Follow Me Home" program

Noninvasive observation.

Because of constraints such as time or access, you may have to make your observations in public environments without prior permission.

This can reveal a lot of information, especially in high-density areas.

Because you're operating in common public space, there's no need to schedule your observations.

Example: Architect Louis Kahn and how he designed the green spaces between the buildings of the Salk Institute.

Intercept.

This approach includes visiting a store, watching the purchase process or general customer interactions, and approaching people to speak with.

Your aim is to understand how people make purchase decisions (or decisions not to purchase) right while it's happening.

Documentation:

Research activities should always be captured by some form of documentation:

- notes
- photographs
- video
- audio
- participant output in the form of drawing, writing, survey, digital entry, prototyping.

Summary.

1. Make a list of questions
2. Define the relevant audience
3. Work out the locations & timing
4. Plan Interviews & observations

- Open-ended interview and observation, noninvasive observation, intercept

**An Instinct for
Change—**

The potential for turning points

are all around us.



Enjoy the
possibilities.