

IBICT Lecture 3

Introduction to technology battles

2 Lectures on

→ technology battles

→ skillful innovation

Answer the following questions:

① WHAT IS A BATTLE?→ A CASE STUDY

- e.g. Concord
- Main events,
 - Life-cycle
 - Previous work
 - Key people

business idea

topic analysis: open-ended,
multiple ideas, analysis;
CRUCIAL: presence of critical elementanalysis of a solution /
of competitive solutions

story to illustrate a concept

There are 2 angles of seeing a case study:

- a) induction → mathematical concept: prove that a property holds for natural numbers with the use of
- base case ($n=0$ or $n=1$)
 - inductive step (if it holds for n , move it holds for $n+1$)

→ epistemologic concept (scientific, experimental)

Meaning: use a big no. of observations to learn a law / rule (also for automated learners)

MAIN IDEA: Induction allows a GENERALIZATION starting from something specific

Are there problems with induction?

a.1 → ANSW. from STUDENT: if the dataset is not general enough, wrong law is extractedBut ... Are you aware that your dataset is pevtrial?

NOT ALWAYS!

Your samples that you use for induction should be

- > qualitative
- > diverse
- > broad

a.2 -> What you have seen in the past may not be enough to get a clear idea of the events;
You don't have all kind of events in your past

e.g. Karl Popper gives the example of the farmer who feeds the turkey every day at 8 a.m.

The turkey expects to be fed also on the Thanksgiving day, but instead it is killed and eaten by the farmer.

-> It could not have foreseen that

SCIENTIFIC METHOD -> it is falsificatory; try to contradict hypothesis

↓
look for situations where something different than expected happens

e.g. change the environment conditions when boiling water to show that it does not always boil at 100°C

b) deduction : knowing a theory, try to find counterexamples which contradict it

↓
e.g. conspiracies (Moon landing, 11th September, (anon) flat earth)

Might not work if examples are not contradicting my idea (I can have a false theory but affirm that it's true)

For the battles we need the component of the

BRITISH PARLIAMENT

Videos -> Prime Minister's Questions on 2nd October
-> Order!

Note -> Moderation
-> Stand up to talk
-> Expressive people
-> shout to agree or not

-> Chaotic process
-> BUT some formalism in the

- procedure
- turn to speak (designated place)

These are the REPRESENTATIVES of people

Readers

present

② Why do we use BATTLES to study I&E?

→ fun, open-minded, critical with grounded opinions, simulation of real life

... to STUDY ENTREPRENEURSHIP?

→ because the entrepreneurial figure is bold,
speaks as representative, makes sense of situation,
is competitive, knows how to persuade & win major

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Battles are DEBATES:

• Open debates: deal with problems which don't have a decided solution; there are multiple directions

e.g. climate change, population control,
privacy, gender, growth ↓ decrease
exploitation of natural resources

• Closed debates: solution is already decided

e.g. junk food, vote right for women,
Earth is not flat, vaccines

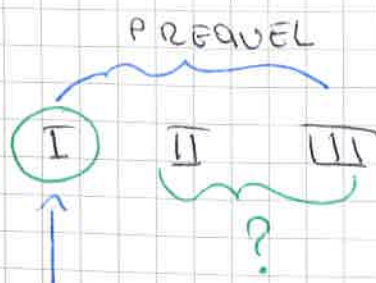
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What are we focusing ⁱⁿ on this course?

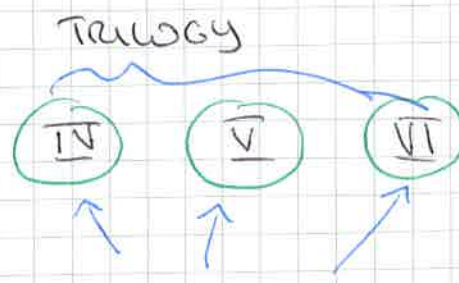
↳ Prospective vs retrospective rationality

e.g. STAR WARS: reconstructing a story

STAR WARS



Anachim SW
as a Kd, superkind



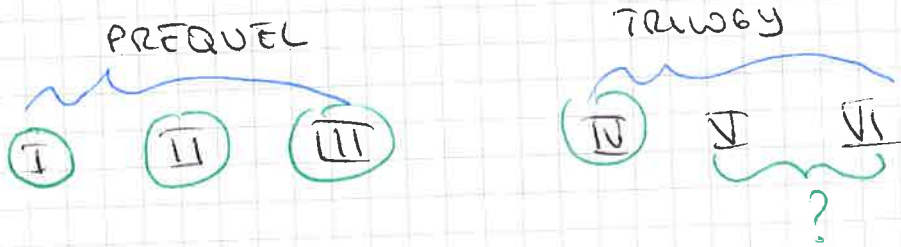
Luke, Empire, Ship, Death
Vader father of Luke

What is in II/III?

↓
Anachim becomes
evil, the Jedi's
thought he
was the most
powerful; there
is a fight...

GUESSED ✓

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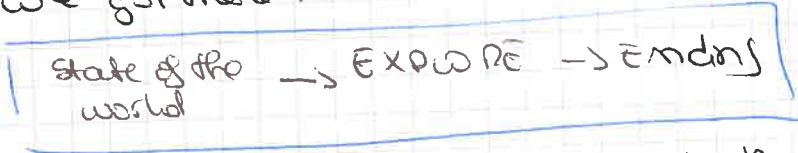
Knowing the story in chronological order, what happens in the last movies?
 Because of hint (= happy ending) we can understand that the bad guy is somehow defeated, but how?

! He is Anakin, the good young boy, the father of Luke. Luke turns he back to the good side!

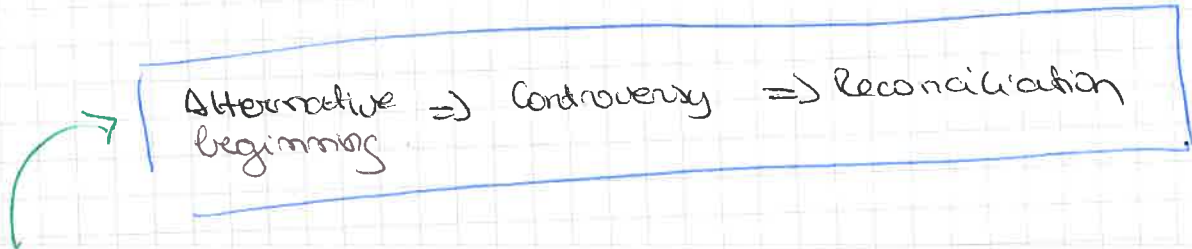
~ GUESSED X

MAIN POINT: Reconstructing the middle part is easier than reconstructing the ending

→ RETROSPECTIVE: We know the ending, how did we get there?



→ PROSPECTIVE: Development, what happens in the end



Create questions

(THIS IS WHAT WE WILL DO!)

We will deal with CONFLICT and COMPETITION, but also COOPERATION.

Take COMPETITION in the long term, also and especially in the field of STARTUPS, which have to innovate to survive.

Also consider that there are two types of innovation:

- disruptive → completely new idea, huge market
- incremental → reinvent existing product, take a niche market

The market can also be:

-> fragmented -> small companies, small group of customers
e.g. ice cream shop, restaurants
↳ also good for startups

-> big, compact -> e.g. cellphone operators (Vodafone...)

To perform a disruptive innovation is much harder:

- companies have to enter the market in a bold way, to share knowledge in a big market.

Examples are Iliad, N26, Revolut -> online operators in

"traditional" sectors

This, which looks like an incremental innovation, is actually DISRUPTIVE due to the DIGITAL element

③ WHO WINS THE BATTLE?

-> THE MORE CONVINCING, irrespective of the fact of being right or wrong

CONTENT OF BATTLES

a) Horizontal

Common ideas, principles

e.g. entrepreneurship, innovation, social / economic impact, top-down vs bottom-up
(TD) (BU)

b) Vertical

Organizational structures, topic just touched once

c) Scenario

TD vs BU perspective for climate change

-> PROSPECTIVE THINKING

BATTLE TOPICS → slide

CLASS FLOW

- 1) Before the battle: meeting with teachers about topic and rules of battle
2 weeks } research, context, form arguments, questions
- 2) class: 2 teams debate as in British Parl. :
15 min of presentation
+
debate or delect!
+
conclusion (restate statement / change perspective)
+
class and jury vote
- 3) After class: report of battle, bigger part

SUMMARY

- Battles are case studies based on debates
- Debates can be retrospective / prospective
- Plausibility
- Content is horizontal and vertical
- Abstraction through scenarios

Question: How does a team take a position?

Consensus, or compromise, or coin flip

NEXT

Skills for innovation