CHAPTER 15:

HOW DOES ARNIE KEEP HIS SKIN ON THROUGH SITUATIVE LEARNING IN THE MOVIE *PREDATOR*?

Mark Childs and Mike Collins

Having learned some of the ways of Social Constructivism, the Zillas travel deeper into the land. This place really does seem to have a lot of useful stuff dotted around, but Markzilla is starting to get a bit whiny.

'Can we go and visit the Deep Elves now?' he pleads.

'Well…' says Mikezilla.

'It is just up the road, after all,' agrees Beckzilla.

Markzilla trots happily ahead. 'Most of my friends are here,' he tells them.

'They've got some cool stuff. I'll show you Activity Theory and maybe later we could look in on Communities of Practice.'

In the chapter about mapping the Realm of Pedagogy we mentioned how, when writing this book, we discovered we had different models of how the various pedagogical theories can be divided up. Those models overlapped a lot but didn't quite match up.

One thing we agreed about when writing this book was that we'd make it straightforward for the reader to locate different theories within their overall context. Without some sort of map, it's difficult to see how the theories are connected; which are the larger overarching concepts and which are subsidiary ones; which are closest to each other and which are furthest apart. So when we started putting a map together, we ran into some problems.

Beckzilla, who's studied history and inclines to an interpretivist view of the world, was working with a chronological account, which divides and arranges theories chronologically, depending on when they were first adopted. On the other hand, Markzilla, who's studied both natural science and social science but as separate degrees that have very different ways of viewing the world, was approaching them from how they drew on different epistemologies. Although they both had three overarching terrains for how we looked at the theories, they were drawing the boundaries in different ways and using different labels for the same things (and sometimes the same labels for different things).

After heated discussions, the Zillas created a map that divides pedagogic theories into four main categories (see Chapter 6), and in our descriptions of social constructivism and situative learning we've emphasised the dialogic elements of social constructivism and the environmental elements of situative learning, so they at least look like separate categories. This is why you're unlikely to see a framework quite like ours. It worked for our purposes for this book, which is all that frameworks need to do. Our recommendation is: don't worry too much about how these theories fit together. Pick a map that makes sense to you (pick ours!) and stick to it. Just be aware that if you're communicating with anyone else about these things they may have a different map in their head. If you're writing anything up, make it clear which map or framework you're using.

We're going to venture into the long grass as we explore the model that Mark had in his head when he started learning about pedagogical theories, partly because it includes some useful ideas, and partly to model how you can mix and match others' theories to make something that works for you. If you're not interested in that, just skip ahead to 'What exactly is situative learning'.

But before that we look at one of our favourite movies, *Predator*, and ask: **How does Arnie keep his skin on through situative learning in the movie *Predator*?** In order to stay focused on the task at hand, we've cut out the fan theory about all Arnold Schwarzenegger's movies being linked, so for that you'll have to listen to the original podcast.

Predator (1987)

The original *Predator* movie came out in 1987, was directed by John McTiernan, and starred Arnold Schwarzenegger (Arnie) as the lead character, Dutch. There have been loads of movies in the series since, but none of them have really captured the feel of that original movie, although Markzilla likes *Predator 2* a lot ('It's got Gary Busey in it!') – but it's best not repeating the argument about that here.

The 1987 *Predator* film follows a team of elite commandos on a mission in Central America. They've been tricked into doing this by CIA agent Dillon, who tells them they'll be rescuing hostages. Actually, there are no hostages, it's a ruse to get them

to take out a rebel camp after some Green Berets Dillon's already sent in there have mysteriously disappeared.

The elite commandos wipe out the camp anyway, and take captive one of the rebels to play the role of token female in the movie. As they make their way to the extraction point, they're hunted by a technologically advanced extraterrestrial creature that bumps them off one by one in fairly gruesome ways. For the Predator it's a ritual hunt. It's customary to land on a planet, kill the local wildlife, then take trophies and return home. Or lose to the local lifeforms and then commit suicide by setting off your Yautja wrist bomb.

The Predator has a neat camouflage technology, making for some great visuals, as the victims catch only glimpses of it in the trees. It also only targets people who carry weapons, which becomes more obvious in *Predator 2* (released in 1990), which is set in a crime-ridden future Los Angeles (so like our past now). In 2010, *Predator*s was released as another direct sequel to the original film, featuring a group of individuals who are dropped onto an alien planet and hunted by Predators. In 2018, a direct sequel to the original *Predator* was released called *The Predator*. This was directed by Shane Black, who had a small role in the first film. This movie introduced a new group of soldiers and a more evolved Predator, but ended up with a script that hadn't evolved at all. Disney acquired the rights to the *Predator* movies when they bought 21st Century Fox in 2019, and their first entry into the franchise was a prequel to all the others. It was set in 1719, titled *Prey,* was the first-ever feature film to have a version entirely in Comanche, and was a bit of a return to form.

There have also been a couple of crossover films featuring the Predator creature. *Alien vs. Predator*, which was pretty good, and *Aliens vs. Predator: Requiem* which was so bad it simultaneously killed off both franchises for quite a while. We summarise the movies in the table below, together with their imdb ratings out of 10, which we are a pretty good guide to how good they are.

Movie	Year	IMDB rating
Predator	1987	7.8
Predator 2	1990	6.3
Aliens vs Predator	2004	5.6
Aliens vs Predator: Requiem	2007	4.6
Predators	2010	6.4
The Predator	2018	5.3
Prey	2022	7.1

Table 15.1 The Predator movies rated

That's basically it. The plot structure is your standard Best Man's Fall[1] but with Arnie doing what Arnie does best against a kick-ass monster-in-the-shadows. The only survivors are Anna (the rebel) and Arnie. Anna basically survives by running away while Arnie defeats the monster. How he does that using situative learning is what we'll be looking at in the rest of the chapter.

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1. A playground game, also known as Best Man's Drop, where one kid stands at one side of the playground and pretends to machine-gun everyone else – they compete by pretending to die in as dramatic a way as possible – this was in the days before the Gameboy was invented, obviously. We're using that as our name for the subgenre of movies where the storyline is basically a series of deaths which aim to top the previous ones in their inventiveness.

Situative learning

The model situative learning comes from

The model of pedagogy we're looking at in this chapter identifies three perspectives on learning (Mayes & de Freitas, 2004: Conole et al, 2005). If we mapped this model, it would have three lands: associative, cognitive and situative. The **associative perspective** focuses on learning through association and reinforcement – operant conditioning (see the chapter on *Pokémon Go* and behaviourism) is one example. This sort of aligns well with the Positivist Land of the Dwarves in our shared map. **The cognitive perspective** is the 'outcome of an interaction between new experiences and the structures for understanding that have already been created' (Mayes & de Freitas, 2004) and aligns pretty much with the constructivist and social constructivist areas in our map. Finally, as we'll explore later, the **situative perspective** looks at how learning is influenced not only by its context (such as its cultural and social setting), but also by the environment in which it's located.

Associative perspectives include a variety of different theories that are empiricist in nature. They link tasks to behavioural models of how the brain works, and then focus on the instructional design of the content in order to make best use of these empirical findings. Martin Oliver (n.d.) wrote a follow-up to the 2004 report by Mayes and de Freitas, in which he looked at how different perspectives use different types of evidence. When Markzilla was building up his map of pedagogies in his head, he used Oliver's work as the basis for dividing the pedagogies. Behaviourism, cognitive architecture, cognitive load and so on are all investigated by measuring things, so they can all be grouped together as **positivist approaches**.

What this framework calls 'cognitivist perspectives' include 'communication, explanation, recombination, contrast, inference and problem solving' (Conole et al, 2005). From an epistemological perspective, a lot of the evidence here is based on learner reflection, so these approaches are within the **interpretivist** domain.

Consolidating our whole mapping exercise a bit more, it's possible to view these differing perspectives as analysing learning at different levels of aggregation.

- Analysis from an associative perspective is concerned with empirical observations. It analyses overt activities and the outcomes of these activities for individual learners.
- Analysis from a cognitive perspective attempts to describe the detailed structures and processes that underlie individual performance, either with resources or with other learners.
- Analysis from a situative perspective aggregates at the level of groups of learners, describing activity systems in which individuals participate as members of communities. (Mayes & de Freitas, 2004).

For any learning situation you can a) examine the learner in a positivist way by direct observation of what they do or what their brain's doing, b) ask them, in an interpretivist way, how they or the group are learning and how they're building up ideas in their heads or c) look at what the group produces, the record of how they've interacted, and our interpretations of that, using a combination of epistemologies.

Markzilla's brain, observed here thinking about old Kaiju movies

Although we found the division into approaches by their epistemologies useful, we also found the labels confusing. In our map in Chapter 6, the 'assimilative' category includes theories based on empirical observations of how the brain works, and these observations inform the design of content that aligns with these observations, so we've dropped the word 'assimilative' and replaced it with 'positivist'.

We also dropped the word 'cognitivist' because it confused us by sounding as if it applied to the brain-focused studies (as in cognitive science) rather than the social-focused approaches. Also with this category, when we put our map together, we took into account the fact that the literature often looks at these as separate approaches, we separated the constructivist theories into those that are solely constructivist and those that are social constructivist. Constructivist perspectives tend to be interpretivist because they draw on accounts by learners of how they've built up their learning.

So: with positivist, constructivist, and social constructivist as our first three categories, we then have situative learning as a fourth category, which we'll get into now.

What exactly is situative learning?
Situative learning emphasises that learning is always situated in a context. The idea is a bit broader than situated learning, which is a group name for theories about how learning can unintentionally be acquired from culture and practice. This definition of situated learning comes from Lave and Wenger of communities of practice fame (see the next chapter for details). For a summary of situated learning we like, see *New Learning* (Kalantzis & Cope, 2022), a book that's not only comprehensive on a range of pedagogical theories, but also available free of charge on the authors' website.

I see what you mean about Lave and Wenger claiming situated learning, and situative learning being something different but I wonder if the two got mixed up somewhere along the way. There's not much written these days about situative learning, but there's a lot written about situated learning, using it in a way that is the same as situative used to be. It's like social learning, which was a massively well established positivist theory, and then people got mixed up with learning via social media and groups, and it now means something completely different. ~Beckzilla

Situative learning includes both intentional and unintentional learning and it's a perspective that looks at elements including the context of the classroom, the design of the environment, how the students interact within that environment, and so on. Checking in on Martin Oliver (n.d.) again, he sees the data about situative learning coming from direct observations of the environment, as well as interpretations of social interactions, and the developing identities of learners. It includes measurable stuff we can see from things like virtual learning environment (VLE) data, as well as observers' interpretations of what learning is taking place based on reviewing discussion forums, or watching videos of classroom activity. Epistemologically, then, this is a mixture of positivist and interpretivist viewpoints.

A situative learning perspective is particularly useful in conversations around online learning. One reason for this is that the other perspectives are essentially unchanged when you switch from in person to online. The behaviourist and cognitive architecture stuff in the brain is the same, because it's the same brains doing the learning (don't get us started on digital natives – an idea that belongs in the Quagmire along with learning styles). The experiential and active learning stuff builds on personal

knowledge creation, so that's the same (check the *Matrix* chapter for our justification for this). What changes online are the environment, the ways in which people connect with each other, and how communities are formed. All of these fall within the scope of a situative perspective.

Situative learning can be broken down into the interplay of three areas: **environments and contexts** in which social practice takes place, processes that support **learner identities**, and **dialogue** that facilitates learning (Oliver, n.d., 5).

1. Environments and context

Context provides a framework for use of the product or results at a specific time, place and situation in these social, psychological, and material environments. So we could look at how different classroom designs have an impact on the dynamics between learners. If the learning is taking place online, we can look at how different ways of using discussion boards impact on engagement.

We can also get into discussions of sociomateriality, which is the idea that the stuff we use – technology, spaces, objects, and so on – can't be understood or assessed in isolation, but the ways people interact with them have to be taken into account too. This is partly because we each approach these things in different ways, and also because what the technologies represent has been socially constructed. In *An Entangled Pedagogy,* Tim Fawns (2022) discusses many of the models of sociomateriality, if you want to know more. These include Activity Theory, Actor-Network Theory and quite a few others. We won't go into detail about them here, but the key thing for educators is that they present a range of different ways to slice up what's going on for analysis. So, for example, you could use Activity Theory to look at interactions in a community of learners using a specific tool. This would lead you to examine how those interactions change depending on whether you then look at a different community using the same tool, or the same community using a mixture of tools. Alternatively, you could look at how the interactions differ, or the contribution of different roles within the group, depending on what the object of your study is.

The Five Stage Model (Salmon, 2022) is another model classified by Conole et al (2005) as situative learning. The Five Stage Model is a process for encouraging online learning; mapping learning activities to where the learners are in a growing familiarity with the platform, and linking this to an increasing level of participation in an online community. It's situative in that it makes explicit the links between context (not just the platform but how easy people are finding it to use), community (the more you use it the better you get to know each other, and vice versa) and learning (the more developed their use of technology and sense of connection with each other, the more the students can learn).

2. Identity

One of the aspects these models don't really include is learner identity, which is a big omission as an individual's identity will not only affect how they interact with a community, it will also have an impact on the degree to which they choose to engage with a technology, for example if they have an ideological opposition to a specific platform.

For more on the specifics of learner identity, take a look at Markzilla's chapter in a book on digital identity (Childs, 2011). It could be argued that identity is so firmly embedded in society that it doesn't need a separate category, it's just more context. Or it could be argued it's another tool we create for interacting with others. As it's so contested, it makes sense to add it as another separate category for analysis, which Mark did when coming up with an extension to Activity Theory in a 2010 paper (Childs, 2010).

3. Dialogue

The main driver for learning within communities is dialogue. This overlaps with social constructivism (which we looked at in the previous chapter). On our map, the difference between the two is that the social constructivist perspective looks at the individual constructing internal mental models as a result of their interaction with others, while situative learning looks at the knowledge that is being co-created *externally* through the interactions. So … same activity, but the focus is on different things. Obviously, both are happening simultaneously but few models encompass both (for one that does, see Chapter 17 on constructionism and Apollo 13).

From a researcher perspective – particularly researchers reviewing asynchronous online discussions where emergent social construction is easier to capture than spoken dialogue because it's recorded as text – this is fascinating, as you can see the interactions emerging on whatever platform you're using, rather than relying on what the learners report is happening in their heads. From an experimental point of view, you don't need fancy scanners to look in on what the brain is doing, and you're not dependent on learners reporting what they're feeling. You can also then relate this to which teaching approaches and platforms support this process effectively and which don't.

A hat is better than a brain scanner if you're communicating that you're feeling dapper.

Ultimately though, as a researcher it's still your own interpretation of those observations that you're working with. Even if you're applying learning analytics, they may be positivist in terms of bare numbers like drop-outs from a course, but working out why people have dropped out? That's an interpretation. Even so, epistemologically and methodologically, doing research from the situative perspective by examining the context for learning is a nice midway point between cognitive science's hard data and the reflective interpretation of the constructivists.

The answer

The key elements of situative learning are: context and connection to the environment (tools, platform, that sort of thing), identities of learners, and the social construction of knowledge that occurs through the dialogue and interactions. Now we'll use these elements to answer our question: **How does Arnie keep his skin on through situative learning in the movie *Predator*?**

To start with the social construction of knowledge by the commandos in *Predator*, it's only by pooling their knowledge that they start to form an idea of what's going on. The first person who picks up and works out they're being preyed on is the scout, Billy. He senses that something's out there. He's able to do that partly because he's more connected with his environment than the others. He's more of a jungle tracker than they are so, because of his immersion in the environment, he's a faster learner, and he senses a disturbance more quickly.

In contrast, CIA agent Dillon is way behind on the learning curve. He trips, and is nearly stung by a scorpion. In lots of small ways, the film indicates how unfamiliar he is with the space and shows that he's not functioning properly within it.

Because of this, he's not able to make decisions effectively, and he learns more slowly than the others. On the other hand, Anna, the female rebel they have (sort of) kidnapped, is a local and has her own knowledge about the environment. She's aware of the Predator from folklore and knows it's a demon that collects men as trophies. Her cultural knowledge is added to the mix; for her this is a real thing that her people have known for generations.

In the middle of all this is Dutch, the Arnold Schwarzenegger character, whose real expertise lies in putting together disparate pieces of information. His role is commander, and we see from situative learning models such as Activity Theory how role plays into the dynamics of a learning situation. At first Dutch dismisses what Billy is saying because he thinks it's not plausible. But they also have evidence that people are being hunted because they saw, skinned and hanging from trees, the Green Berets commando group that went in before them.

A key transition point in their perspectives is when the first of the group is killed. This is Hawkins, played by Shane Black. Anna sees something in the woods immediately afterwards, so they're aware that something is there. One of your colleagues being killed is a hell of a learning incentive.

That's when Dutch starts taking a more concrete role in their learning because, as the leader, he's the guy synthesising the information and choosing which bits are absorbed. He prioritises the information presented by Billy and Anna because they both have specialist knowledge. Dillon is still resistant, however, because he's not really part of their community.

Identity plays a strong part in how the members of the group adapt to their new situation. The initial identity of the team is that they're commandos with a moral code. They're a rescue squad, not assassins. During their journey through the jungle, their identity changes bit by bit; the ones who survive the longest are the ones who recognise their new identity as prey. This is

where Dutch succeeds, because his whole way of functioning in response to the Predator is by acting as prey and using that identity against his opponent.

A couple of the commandos can't cope with this new identity. Mac chases the Predator into the jungle in a doomed attempt to shoot it on his own. Billy can't adapt either. Even though he's the first person to recognise that they're prey and even though he's immersed in the environment, his identity isn't one that can encompass being hunted. He challenges the Predator on his own, standing on top of a tree trunk, and dies immediately.

Dutch, on the other hand, effectively synthesises the knowledge acquired from the group, but also from observations in the environment. When he's covered in mud, the Predator can't detect him, so he realises it tracks by heat. As he learns from his environment, he's also learning to use the environment. He's learning to adapt the tools around him because he's now fully immersed in the space, both psychologically immersed and also literally immersed, because a big part of his environment is smeared all over him.

We see the same thing happening with learners, particularly online, only with less mud. Situative learning theories are great at deconstructing online learning, because considering all the separate elements helps us see that the technology itself is not key. It's the learners' relationship with the technology that is important; learning to use the technology effectively is crucial for them to learn with it. The more they can use the technology, the more invisible it becomes to them. The more they can be immersed in the technology, the less it acts as a barrier to their learning, and the more it can promote their learning.

For Dutch in *Predator*, the environment is not just to cover himself, he starts drawing on elements he sees within it to use as part of his adaptive strategy. He stops using metal weapons, because the Predator can detect them. Instead, he creates bits

of spiked wood that swing backwards and forwards to crush his opponent. Once a learner is fully immersed in a context, they can more effectively see ways to create and further their own learning.

In summary, Arnie keeps his skin on through situative learning for several reasons.

- The commandos, Anna, and Dillon all learn at different rates because of the degree to which they are immersed in the environment. Dutch is one of the most immersed.
- They succeed to different extents because of their ability to adapt their identity to accommodate what they have learnt (that they are prey) and modify their behaviour accordingly. Of all of them, Dutch and Anna are the only ones who adapt to the new identity fully.
- Dutch is effective at synthesising the information provided by the others within the group so, from that perspective, he's a great leader. Not so effective at helping the others adapt, otherwise the others would have survived too.

Epistemologically, we're not dependent on interpretivist data to draw conclusions about the development of individual learning. We can see Dutch immersed (literally) in the environment, and we can see the artefacts Dutch builds that demonstrate the principles he's acquired. Or we could, if they hadn't all been blown to shit by a small nuclear explosion at the end.

Tips for practice

A key principle is to give your students a chance to become immersed in the use of tools before employing those tools for learning. If they're studying online, give them opportunities to learn how to use the tools, because if they feel connected to the online space, they're in a better position to learn from it.

As with social constructivism, give your learners opportunities to form a community. The effectiveness of the social aspects is very important. In situative learning, social and technological elements are closely intertwined. If you can build familiarity with the platform alongside familiarity with other learners, you'll find the two reinforce each other.

The final key thing to learn is to create a space or a scaffold for students to work through their change in identity as the learning changes who they are. One of the problems that Billy and Mac have is that there's no way for them to recontextualise who they've become as a result of what they've learnt. We see this frequently, and it's often overlooked – learning changes students. We rarely prepare students for the changes in who they are that result from their learning.

Also, as we learnt when recording the episode that became the basis for this chapter, ensure your environment isn't on fire, as that can severely limit the extent of your learning.

We begin finding our references. We found them sometimes without their ISBN numbers... and sometimes much, much worst

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