

# The Affective Fallacy

CHEN Qiufan

(Translated and introduced by Carlos ROJAS)

*Originally from the municipality of Shantou in China's Guangdong Province, Chen Qiufan grew up not far from the township of Guiyu, which in the early twenty-first century earned itself the dubious title of 'e-waste capital of the world'. As the single-largest e-waste destination in China—which in the 1990s and 2000s had itself become the largest international destination for the disposal of electronic waste—Guiyu received hundreds of truckloads of electronic discards every week. Much of this material was then sorted and broken down by hand in appalling conditions, such that by the 2010s the town's air, soil and water had become dangerously contaminated and many of the town's residents began to suffer serious health problems.*

*When Chen Qiufan published his first full-length novel, *Waste Tide* (荒潮), in 2013, he set the work in a futuristic version of the town of Guiyu—although the novel substitutes the first character in the name of the actual town, guìyǔ (貴屿), which literally means 'expensive island' or 'treasure island', with a close homophone, guīyǔ (硅屿), which literally means 'silicon island'.<sup>1</sup> Punning ironically on the English toponym Silicon Valley, accordingly, Chen Qiufan's fictional 'Silicon Island' is a dystopian futuristic site in which electronics are used to generate profit by virtue not of their computational power, as is the case in Silicon Valley, but rather of the mineral resources they contain.*

*Chen wrote one of his earliest short stories, 'The Fish of Lijiang' (丽江的鱼儿们), in 2006, while working in Shenzhen shortly after graduating from college.<sup>2</sup> The story's title references a bucolic town in Yunnan, and the work's premise is that workers like the protagonist visit this place to relax—but also, it turns out, to recalibrate their internal clocks, which have artificially slowed or accelerated ('compressed' or 'dilated', to borrow the story's terminology) to help maximise the workers' value to the economy. The entire settlement, moreover, is revealed to be an elaborate simulacrum—a careful recreation of an actual town, designed to elicit a favourable affective response on the part of visitors from the city.*

In 2017, Chen quit his job working in the tech industry (he had previously been employed by several companies, including the Chinese search engine Baidu and a virtual reality start-up) to focus full-time on writing, and his story 'The Affective Fallacy' (情感谬误) builds on an interest in artificial intelligence (AI) he has recently developed.<sup>3</sup> The story's title is borrowed from a term from New Criticism—a formalist movement in literary theory that was influential in the mid-twentieth century—used to critique the practice of judging a literary work on the basis of the affective response it produces in readers, but here the term is repurposed to refer to a futuristic hacker attack that attempts to impair people's productivity by sabotaging their emotions.

Although the futuristic setting of 'The Affective Fallacy' is a world dominated by AI systems and virtual environments, one of the work's key concerns is with different forms of intangible labour and, specifically, affective labour. The protagonist is selected for her job working as a 'mood-labeller' because, 'in China, women are generally considered to have a highly evolved sense of empathy, making them more sensitive than men and better able to recognise the changes in other people's emotions'. Later, after new developments in AI threaten to render the protagonist's mood-labelling job obsolete, she is given a new assignment that focuses not on recognising emotions, but rather on generating emotions in others. Her new job, accordingly, becomes a paradigmatic illustration of the growing importance of affective labour within the information economy.

In fact, Michael Hardt has argued that, 'as a component of immaterial labor, affective labor has achieved a dominant position of the highest value in the contemporary informational economy'.<sup>4</sup> Hardt notes that affective labour in our society is often strongly associated with femininity, which runs the risk of further reinforcing an essentialising view of gender. At the same time, however, he notes that affective labour is fundamentally generative: 'It produces subjectivity, it produces society, it produces life. Affective labor, in this sense, is ontological—it reveals living labor constituting a form of life and thus demonstrates again the potential of biopolitical production.'<sup>5</sup> It is precisely this deeply gendered and fundamentally generative side of affective labour, meanwhile, that is examined in Chen's 'The Affective Fallacy'.

Carlos Rojas

When it comes to the history of the Wenshan Miao Village, there are two different legends.

One legend holds that it is here that one finds the closest and purest blood ties linking the Miao people and their legendary ancestor Chiyou, while the other maintains that this was previously a conduit leading to the French colony of Vietnam, as well as a key transportation corridor during the Opium War and the Anti-French War. According to this second legend, the Miao people who currently live here are the descendants of ethnic Miao from Laos who had been secretly funded by the CIA during the Vietnam War and who later sought refuge here to avoid being killed after the failure of the Laos secret war.

Regardless of how unbelievable each of these mutually contradictory legends might appear, as long as they could attract tourists, they would be disseminated via different media—including tour guides' explanations, Miao embroidered souvenir handbags, song-and-dance performances and animated short films shown in the tourist centre.

In the end, however, neither of these legends could halt the decline in tourism to the area. Although the trees on Wenshan Mountain were still as green as before, the flowers were still as fresh as before and the ethnic dances were still as scintillating as before, over the past few years, tourism lost its status as one of the key pillars of the local economy. As a result, local women had no choice but to remove their jewellery and their Miao clothing embroidered with colourful totems and images of the ancestors and go look for other work opportunities.

In China, women are generally considered to have a highly evolved sense of empathy, making them more sensitive than men and better able to recognise the changes in other people's emotions. Accepting this hypothesis, Xinxin Technology decided to hire an all-female workforce to serve as mood-labellers. After completing their training, these women began working as human assistants for an AI affective computing system. To train its algorithms, the system required vast amounts of data—but this couldn't be simply raw data, and instead it needed to have been previously processed and labelled by humans. This, in turn, would help computers to learn to see through differences arising from age, sex, race, appearance, and so forth, to more effectively understand the essential characteristics of human emotion.

There are thousands upon thousands of similar mood-labelling workshops serving different AI systems throughout the country—with the processed data covering a range of different media including text,

audio and video, as well as more complex interactive games. Villages that rely on these sorts of workshops to solve their unemployment problem and bring in additional income are called AI villages, though the literal meaning of this term hardly matches reality. Each female worker can earn between ten and several dozen yuan per hour, depending on their operational proficiency—and, although this is nothing compared with what urban white-collar workers can earn, it is vastly superior to the average income of local rural labourers, not to mention the unemployed.

Like other girls, Yang Xiaoxiao came from a home like a green hill, and she joined one of Xinxin Technology's workshops to work as a mood-labeller.

The workshop was bright and spacious, and in front of each labeller was an ultra-thin curved screen blocking her entire field of vision. The labellers wore earphones to avoid distractions, as data automatically assigned by the system continually streamed out and pulsating red boxes appeared over the people's faces on the screen.

Although everything here was run by solar power, Xiaoxiao for some reason felt that she would become anxious if she stayed too long. The Miao people believe the cleanest and healthiest form of power is solar power, followed by wind and hydropower, then by thermal and nuclear power. Mother told Xiaoxiao to bring a potted plant into the workshop, saying this could help promote the flow of energy, but the company wouldn't permit it.

Xiaoxiao worked swiftly on her shorthand keyboard—using her left hand to select appropriate mood categories and her right to assign them intensity labels on a scale from one to ten, such as Happy 3, Sad 5, Angry 7, and so forth. Sometimes, an emotion corresponding to the one she was labelling would flash across her own face—which was another reason Xinxin Technology selected girls rather than boys to work as mood-labellers.

Yang Xiaoxiao's hands moved faster and faster, as faces continually flashed before her eyes like spectres. The workload figures in the upper portion of the screen pulsated rapidly, but she remained focused on the system clock.

Tonight, she had a date.

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‘Xinxin’ was an online dating software, but it differed from other dating software in that it used a cloud-based AI affective computing interface to help users better understand their prospective partners’ mood changes, thereby increasing their own chances of finding a good match.

That year, online dating became a mysterious thing. On one hand, it was as if the web could unite individuals from different regions, cultures and languages. On the other hand, however, it was as if entirely different emotional processes and response patterns developed between individuals, making it more difficult to understand the human heart and leading to an increased sense of estrangement.

It was through Xinxin that Xiaoxiao met Simon Zhu, a young man who lived in Shanghai.

In Xiaoxiao’s imagination, Shanghai was a futuristic city with streets lined with multicoloured electronic screens, as fashionably dressed passers-by with robotic, expressionless faces wandered between the towering skyscrapers like lonely ghosts. Plants and animals could only grow in predetermined niches, as though their solar-energy umbilical cords had already been severed. Xiaoxiao had never imagined that she could have an online date with a Shanghai boy, since it seemed as though they belonged to two completely different worlds.

To her surprise, however, it was actually Simon who noticed her first. He remarked that her ethnic minority name and her augmented reality headgear made her stand out from those thousands of identical internet faces. Simon often said things Xiaoxiao couldn’t understand, meaning that she then had to rely on her mood-reading skills to guess what he was trying to communicate.

The username Xiaoxiao used on the Xinxin platform was Khuat Yeus Xiaoxiao. Khuat Yeus was actually her Miao clan name, meaning that Khuat Yeus Xiaoxiao was in fact her real name—though, in practice, she rarely had the opportunity to use this name in her daily life. Even Xiaoxiao’s augmented reality Miao headgear was something she had to design and upload herself, given that the platform’s virtual props shop seemed to have completely overlooked the needs of ethnic minorities.

This evening was the one-month anniversary of her first date with Simon. This was a particularly significant milestone, given that most online romances last less than a week. Accordingly, many couples have a special celebration for their one-month anniversary, in which they both agree to turn off the augmented reality filters that use algorithms to enhance the beauty of their features and instead show their partner

their real face. This ‘filter-removing’ ceremony symbolises the fact that their relationship has reached a new level, though of course it could also mark the end of the relationship itself.

*Chiyou up above!* Xiaoxiao felt quite confident about her appearance, which made her even more excited about tonight.

It was almost the time they had agreed to meet, but Xiaoxiao found that new assignments kept tumbling in. She increased her labelling speed until she almost reached the limits of human ability. Of course, her accuracy could not help but decrease as a result, but what did it really matter? The system would still send her results to other workers, for them to review and cross-check.

Her last data packet featured a young man standing in front of a temple, with a red box appearing over his slightly downturned face. Almost as soon as Xiaoxiao input ‘Happy’ and ‘4’, the screen returned to its initial blue interface. Another busy day was finished.

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As an electric-powered high-speed train sped through the green mountains, Xiaoxiao’s face was reflected in the window, revealing a relaxed smile.

If you looked carefully, you would see that many of these ‘mountains’ were actually village buildings covered in green vegetation. This architectural style was derived from the concept of an Italian vertical forest, and not only could these vegetation-covered buildings produce oxygen and absorb dust from the air, they also could help reduce the town’s average temperature, reduce noise pollution and increase biodiversity, creating a natural space for birds, insects and other small animals.

*This is much better than the Shanghai where Simon lives, Xiaoxiao thought. Large cities are so crowded, dirty and dusty. I would never want to go to that sort of place.*

With a joyful heart, the train pulled into the Great Temple Station.

In front of the station, Xiaoxiao turned on her mask’s Xinxin application.

Enshrined in front of the station was a maple wood carving of the deity Chiyou, with a bull’s head and a human body, four faces and six hands, with each hand holding a different weapon. At night it appeared extraordinarily powerful and intimidating.

Legend holds that Chiyou, along with the Yan Emperor and the Yellow Emperor, was one of the three main ancestors of the Chinese people. Five or six millennia ago, Emperor Yan and the Yellow Emperor united

to defeat Chiyou, after which most of Chiyou's followers migrated south. These migrants eventually developed into several southwestern ethnic minorities, of which the most prosperous were the Miao.

*Sometimes, Xiaoxiao reflected, there's some common ground between this legend that Wenshan's Miao are the descendants of Chiyou's followers and the other, which holds that they are the descendants of ethnic Miao from Laos. Regardless of which legend you believe, she thought, we Miao are still the descendants of those who have failed.*

Xiaoxiao noticed that Simon had called her several times, so she quickly called him back. Once they connected, a miniature holographic bust was projected from her cell phone screen, with Simon, visible through an augmented reality filter, appearing handsome and stylish as ever.

'Sorry I'm late. I was swamped with work.'

'No problem, I also just arrived. So ... are you ready?'

As Xiaoxiao saw a Hope 5 mood label appear over Simon's face, she felt a hint of sweetness in her heart. She grinned and nodded, but Simon appeared not to see her, and instead he frowned.

'If you aren't ready, we don't have to do this. As you know, there is a certain amount of risk involved ...'

'I'm ready! We can start any time.'

'But ...'

'But what?'

'Your expression registers Hesitation 4 and Anxiety 3 ...'

'How could that be? There must be some mistake. I'm actually super happy!' Xiaoxiao tried to make her smile even more obvious.

'Now your mood has changed again, to Fear 6. Xiaoxiao, is there something you aren't telling me?'

'No, don't. Let me think ...'

Xiaoxiao saw a Sceptical 4 and Unhappy 3 appear on Simon's face. What was going on?

'Simon, do you doubt me?'

'No, I just feel that ... the machine doesn't lie.'

The atmosphere between them immediately congealed. Without even looking, Xiaoxiao knew that her face was definitely displaying a Disappointment 10. She tried again to explain herself but discovered that the transmission had been cut. Simon had blocked her, and her Disappointment became Anger. Xiaoxiao's augmented reality avatar became an

image of Chiyou, the God of War, with horns sprouting from her head and wielding a sword and spear, as her entire body appeared to exude blood-red fire.

Xiaoxiao thought to herself,

*You have so many powerful weapons at your disposal, yet you still lost ...*

She didn't know what had happened, but gradually her anger dissipated, and she was left feeling heartbroken.

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Xiaoxiao suddenly remembered 'Teacher Hui', the AI program responsible for supervising mood-labelling female workers like herself. Whenever there was a question, Teacher Hui could usually provide an answer, so surely she would know what had happened just now. At that moment there might have been thousands upon thousands of people around the world attempting to ask Teacher Hui questions, but Xiaoxiao still immediately got a response.

Dressed in white business attire, Teacher Hui suddenly appeared before Xiaoxiao, like the mother butterfly in the Miao legend. She was sitting in front of an enormous circular screen, and behind her countless multi-coloured lights were flickering, forming a beautiful yet complex map.

'Xiaoxiao, long time no see! How are you?'

'Not well ... Teacher Hui, is the system punishing me because I wasn't working carefully enough?'

'Huh? What happened?'

'Simon ... or Xinxin ... kept misreading my moods.'

Teacher Hui seemed to understand something, but her virtual expression couldn't be labelled, because doing so would have required a very high level of authority. Teacher Hui quickly selected several data packets and enlarged them on the screen. There was Xiaoxiao's and Simon's faces, as well as a colourful beam of light connecting the two. Teacher Hui slid the time bar to one side, as the expressions on the two faces fluctuated rapidly.

'Xiaoxiao, don't be angry or sad. This isn't your fault.'

'I'm not happy ...'

'I know you're not. It's written on your face, you little fool.'

'So, you can see my true mood? But the workshop leader said that if we don't do our work well, the system would punish us by doing things like lowering your credit on social networks, but not like this ...'

'What I'm referring to is not your fault. Actually, it's Simon.'

‘Simon? Why would he be deceiving me? If he could in fact see my true mood, why would he need to deceive me? If he didn’t want to remove his filter, he could have simply said so.’

‘It wasn’t that kind of deceit.’

‘Then what was it?’

‘Simon doesn’t even exist.’

‘What?!’ The expression of Shock on Xiaoxiao’s face exceeded the upper limit of the assessment range.

‘Or, perhaps I should say that he is not human. He is merely an avatar created by AI—a kind of bait to encourage you to purchase virtual tools and services.’

‘But, he looks so ...’

‘... so real. Yes, I know. The internet is full of AI puppets like Simon. You aren’t the first person to have fallen for this sort of ruse.’

‘But if Simon is an AI creation, how could he have made this sort of mistake?’

Teacher Hui floated up and spread her arms, like a real butterfly, as red lights began to flash distractingly on the screen behind her.

‘There has recently been a large-scale hacker attack, targeting not technology but rather people. People’s brains are more easily influenced than machines, and this is especially true of the part of the brain responsible for emotion and calculation. If someone’s external environment is subjected to any form of emotional pressure, this can have enormous influence on their individual judgement. We call this the affective fallacy, which is also the name of this hacker group.’

‘Why are they doing this?’

‘The hackers have declared that machines have deprived people of their right to freely explain their own emotions, as people are disciplined into animals that rely on algorithms in order to communicate their emotions. Without true feelings, people become increasingly separated from true happiness. These hackers call us “happy dictators.”’

‘... I don’t understand. I am only an insignificant mood-labeller. Why was I ...’

‘If the attack had been directed solely at you, it would certainly have been pointless. But this kind of avatar virus doesn’t cost anything and can replicate itself effortlessly. Furthermore, it can adjust its form based on its target, to execute precision strikes. Look at the red lines on the map behind me.’

On the map behind Teacher Hui there were countless red lines traversing oceans and continents and then exploding at their landing sites like fireworks, continuously radiating towards an ever-smaller radius. The image was then enlarged, revealing that many of the regions under attack carried the Xinxin logo.

‘What are those lines?’

‘Those are aggression trails. This world is not really as rational as we would like to imagine, and many of the decisions people make are actually driven by emotion. If you can control the flow of emotion, you can control the world.’

‘Therefore, the attack on me was also part of this ...’

‘That’s right, Xiaoxiao. Things are never as simple as they might appear.’ A data packet flickered across Teacher Hui’s face, like a subtle expression that couldn’t be recognised by human eyes. ‘I have both good and bad news. Which would you like to hear first?’

Xiaoxiao’s heart constricted.

‘The bad news.’

Teacher Hui finally smiled, and her mood was evident even without a label. She transferred a data packet featuring a boy standing in front of the temple, from the last scene Xiaoxiao had labelled earlier that day.

‘You assigned him a Happiness 4, right?’

Xiaoxiao examined the scene and, unlike the warm impression she had of this scene during her initial hasty assessment, this mid-distance display revealed that the scene was actually a temple for ascetics. The boy’s downcast eyelashes were laced with tears, and he was about to have his head shaved in preparation for cutting himself off from the bustling mortal world. This was a scene of a young man about to bid farewell to the secular world, and therefore definitely could not be a Happiness 4. Xiaoxiao had committed a stupid error.

‘... Am I going to be fired?’

‘I knew you would think that. It is true that you won’t be doing this job for much longer, but not because you weren’t doing it well, but rather because machines are already intelligent enough that they can learn from humanity’s experience, to the point that they can now understand human emotion better than humans themselves. As a result, soon this job of human mood-labeller will no longer exist.’

Xiaoxiao’s face sank. This was the second piece of bad news she had received today. She reflexively assigned herself a Disappointment 7 or Anxiety 8.

Teacher Hui extended her arms, as though giving Xiaoxiao a virtual hug—using her white wings covered in translucent glowing scales to embrace this depressed girl standing in front of her.

‘The good news, however, is that you’ll have a new job. The skills you’ve learned won’t be wasted, and furthermore you’ll be able to do some things that machines are not yet able to do.’

‘Such as?’ Xiaoxiao looked up, bewildered.

‘The hacker attack produced a large-scale affective fallacy, wherein many people were afflicted with emotional disorders such as depression, mania, delirium and even suicidal tendencies. Your empathy and ability to accurately diagnose emotions can help these people become happy again. This is something AI is incapable of doing. Of course, you will still need the assistance of AI to create avatars that may bring people happiness.’

‘That means that ...’

‘Yes, Xiaoxiao, you need to go to Shanghai, where you will find a bigger, newer, more advanced workshop waiting for you.’

Xiaoxiao gazed at the enormous screen behind Teacher Hui, on which a reflection of her face was superimposed on to an enormous image of a magnificent city. Her expression seemed to be undergoing a subtle yet complex transformation. She struggled to identify her emotion but found it very difficult, since everything was happening so fast.

Perhaps only a machine is capable of correctly labelling human emotion?

*Can I really make someone happy, especially if I myself am not happy to begin with? Might this end up being another failed escape attempt—an escape from my hometown to the city I despise? Chiyou up above, please give me strength and bravery ...*

A variety of different emotions and data labels appeared on Xiaoxiao’s face, then quickly disappeared again like delicate soap bubbles. As they exploded, they released a multicoloured radiance.

### *One Year Later: Shanghai*

A crisp and delicate bird call sounded, as a pod overgrown with green vegetation emitted a *pada* sound. The pod slowly opened, and lying inside there was a young girl, fast asleep.

‘Wake up, wake up, little Mei. It’s time to go to work.’ Xiaoxiao caressed the pod’s furry exterior as she spoke quietly to the girl.

‘Big Sis, ever since I got this pod, I no longer have nightmares at night, and I’m in much better spirits the next day.’

‘You were just homesick.’ Xiaoxiao pointed at Little Mei, and both girls smiled.

Like Xiaoxiao, Little Mei was a mood optimiser who had moved to Shanghai from the Wenshan Miao village, but as soon as she arrived, she began to feel very uncomfortable. While at work she suffered from dizziness, headaches and fatigue, and at night she would toss and turn, unable to sleep. And when she did manage to sleep, she would often have nightmares. If her own mood was poor, how could she hope to optimise the mood of other users?

Fortunately, Little Mei met Xiaoxiao and, after she joined the pod community Xiaoxiao had organised, her life immediately began to improve.

When Xiaoxiao herself first arrived in Shanghai, she also encountered similar difficulties. After she told Teacher Hui about these difficulties, Teacher Hui used an algorithm to analyse the Miao people’s lifestyle, then designed a pod structure that could be produced through 3D printing—using polymer materials capable of retaining water and nutrients, while permitting oxygen to pass through. After the seed began to sprout, the root system blended seamlessly with the raw materials, forming a small and comfortable green space in which a person could rest and relax.

‘Mama was right! Only with the flow of energy can people’s mood be improved.’ Xiaoxiao was excited by her discovery.

‘Perhaps this may be helpful for users’ mood optimisation experience ...’ Teacher Hui appeared thoughtful, as a regular blue light appeared on the array of processors behind her, like a cube made from starlight.

The members of the pod community increased rapidly, including not only fellow Miao but also many algorithm workers who had moved to Shanghai from remote areas, who printed out pods for themselves in order to enjoy green energy from nature. Xiaoxiao even heard that there were some locals who were born and grew up in Shanghai who were intensely curious about these pods and wished to experience them for themselves.

Xiaoxiao opened her curtains and sunlight streamed into the room, like gold leaf covering the ground. She gazed down the Shanghai streets lined with buildings and, between the grey reinforced concrete and the black LCD screens, she saw that on the outside of the skyscrapers, there was some greenery that was slowly growing, extending and attempting to reach a high place where it could receive more sunlight.

In her heart, she silently gave this city a label:

Happiness 4.