

Write an analysis on **one** of the following texts. Include comments on the significance of context, audience, purpose and formal and stylistic features.

Text 1

Before stethoscopes were invented, physicians would listen to their patients' hearts by laying one ear directly onto the skin of the chest. We're accustomed to laying our heads against the breasts of our lovers, our parents or our children, but once or twice when I've rushed out on an urgent house call, leaving my stethoscope behind, I've had to rediscover the traditional method. It's an odd sensation – **intimate yet detached** – to apply your ear to the chest of a stranger. It helps if you stick a finger in the unoccupied ear. Once you tune out all the background noise you begin to hear the sound of blood as it makes its way through the chambers and valves of the heart. The classical belief was that blood travelled to the heart in order to be mixed with vital spirit, or *pneuma*, rarefied from the air by the lungs. The ancients must have imagined a churning within; air frothing with blood the way wind whips up waves on the sea. The first time I placed my ear to a patient's chest I was reminded of holding a conch shell as a child, listening to the imagined ocean within.

When any fluid is forced through a narrow opening there is turbulence, and just as a river flooding through a narrow canyon can be deafening, turbulence within the heart generates noise. Medical students are trained to listen very closely to the subtleties of those noises, and to infer from them how narrow – or obstructed – are the canyons of the heart. There are four valves in the human heart. When they close, you hear two separate sounds. The first sound is made as the two largest valves – the mitral and the tricuspid – close at the same time during the active part of the beat (known as the *systole*), when blood is forced out of the ventricles and into the arteries. These valves are so broad they have thick cords like harp strings attached to their cusps to reinforce them. The second sound is made by the other two valves – the pulmonary and aortic – as they prevent backflow whilst the ventricles refill (*diastole*). Healthy cardiac valves close with a soft percussive noise, like a gloved finger tapping on a leather-topped desk. If they are stiffened or incompetent there are additional sounds: murmurs that can be high-pitched or low, loud or soft, depending on the steepness of the pressure gradient across the diseased valve, and how turbulent the flow.

Starting out in medicine I learned to tell the difference between valve pathologies by listening to a CD of murmurs. I'd put it on while studying, hoping that my subconscious would come to distinguish a 'seagull' from a 'musical' murmur, recognise the grate of mitral regurgitation from the trill of aortic stenosis. There was something comforting in listening to the gurgle of blood as I worked. I wondered if it recalled the sound of the sea, or hearing a storm outside while wrapped up warm, but the sounds were too rhythmic for that. **Perhaps it's the womb, I thought, a deep memory of my mother's pulse.**

A pregnant woman came to my clinic who hadn't felt her baby move for a day or so, and wanted me to reassure her by listening to its heartbeat. Normal stethoscopes are no use for listening to the heartbeat of a baby in the womb; the sound is too fast, quiet and high-pitched. Midwives often use an electronic Doppler probe to find the foetal heart, but I used a modified tube called a Pinard stethoscope, like an old-fashioned ear trumpet, wedged between one ear and the swollen contour of the woman's belly. The best place to lay the trumpet is where you think you've felt the convex curve of the baby's spine. Even with one finger in my other ear it took a while to find the heart – an agonising couple of minutes for the mother. But there it was: a rhapsodic, syncopated interleaving¹ of her heartbeat with her baby's. The foetal heartbeat was distinct, fluttering fast like a bird over the oceanic swell of the mother's pulse, an *allegro* played over an *adagio*. **I paused for a moment listening to the two rhythms within one, two lives within one body.**

Gavin Francis, in the *London Review of Books* (6 March 2014). Used with permission.

¹ rhapsodic, syncopated interleaving: an interplay of sounds

² *London Review of Books*: literary magazine with book reviews and topical articles on politics, history, science and the arts

- Comment on the way the author combines the scientific and the literary.
- In what ways would the author’s structure and style appeal to the target audience?

- Text type: personal narrative; essay

- Audience:
all kinds of people? Magazine readers?

- Culture + context:
?

- Tone + Mood:
tone: appreciative; gentle; poetic; mysterious; tranquil; colloquial; awed
mood: warm; touched; awed; peaceful; loving

- Argument
Doctors should use the “old-fashioned” way instead of advanced technology to feel the liveliness of heart beating.

- Structure + literary devices
structure: general to specific; scientific to emotional.
literary devices marked above.