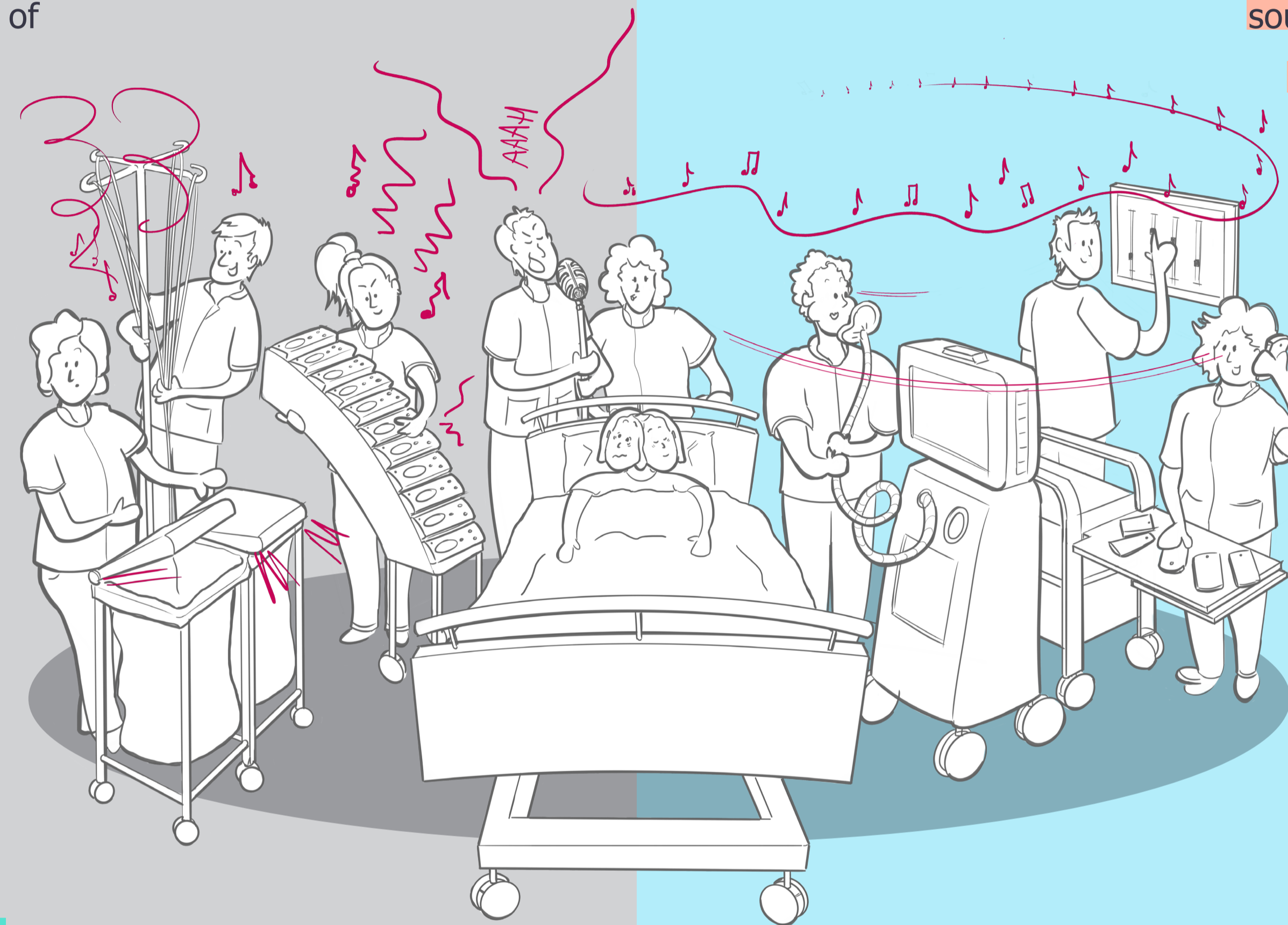


# Sound Cultures of Critical Care

How design could tune sound-related practices of intensive care nurses

Critically ill patients in an intensive care unit (ICU) are monitored and supported by medical equipment as well as a team of intensivists, nurses and other medical staff members 24/7. Due to the audible alarms of the devices, but also because of conversing people and other machinery and incidental sounds, **the ICU transformed into an acoustically hostile working and healing environment.** In light of these sound issues, this graduation project aimed to capture the ICU nurses' sound-related values and practices that belong to an 'ICU sound culture'. By understanding the ICU sound culture, the second aim was to look for opportunities for silencing down the ICU whilst considering the sound cultures.

After a period of observing six Dutch ICUs and interviewing a varied selection of nine ICU nurses, it became clear that the **sounds, or even issues with them, are accepted due to nurses not knowing why (by being ignorant or indifferent) or not knowing how to reduce sounds.** Additionally, the current sound-reducing efforts that do exist, are often taken individually, ad-hoc and they have a short-term impact. When ICUs want to **reduce the sounds with a bigger impact in the long term, ICUs need to create 'sound-issue awareness' and motivate all nurses to act upon the sound issues.**



Working in the ICU should feel like being part of an improvising big band, wherein each member follows a particular rhythm and pace and pays attention to the musical expressions of their team members.

To support ICUs in sound-reduction with a bigger impact, I developed a campaign that challenges the ICU management team and nurses to **establish a 'collectivistic sound culture'.** In a collectivistic sound culture, every individual nurse should commit to the group effort and goal to create a more peaceful sound environment in the ICU. In order to establish this desired sound culture, the ICU management team and nurses can make use of three developed campaign tools in order to discuss their experiences and needs and to find opportunities to change their sound-related habits, individually and together.

In a collectivistic sound culture, nurses should act like an improvising big band: they should strive for creating a harmonious, peaceful sound environment all together. They have some individual freedom, such as in setting their own alarming devices, but they should help each other when the environment starts to sound off-key. **Just like an improvising big band, every individual nurse should pay attention to his or her own and other's sound-inducing practices as musical expressions.** By reacting accordingly towards a more peaceful and friendly sound environment in the ICU, the patient's and the nurses' personal wellbeing and team spirit will improve.

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