

## **PRACTICE ON REVERB**

### **Activity 1: Complete the blanks with the words given**

With the exception of pure orchestral recordings, reverbs are used in nearly every mix. The common \_\_\_\_\_ of close-miking and the dry nature of some sounds produced by synthesizers and samplers result in initial mixes that lack both ambiance and depth (such mixes are often described as '2D mixes'). \_\_\_\_\_ give us the ability to add and craft these missing elements during mixdown, but they can also be beneficial for many other mixing tasks.

### **What is reverb?**

In nature, reverb is \_\_\_\_\_ mostly within enclosed spaces, such as rooms. Reverbs are easier to understand if we imagine an impulse sound, like a hand clap, emitted from a sound source in an empty room. Such a sound will propagate in a spherical fashion and for simplicity we should regard it as traveling in all directions. The \_\_\_\_\_ sound will travel in a \_\_\_\_\_ path to a listener (or a microphone) followed by reflections that bounced from the walls, floor and ceiling. These will be gradually followed by denser reflections that have bounced many times from many surfaces. As sound both diminishes when traveling through air and being \_\_\_\_\_ by surface materials, the reflections will slowly decay in amplitude. Reverb is the collective name given to the sound created by bounced reflections from room boundaries (which we consider to be the main reverb contributors, although in a room there might be many surfaces). In mixing, we use reverb emulators, either hardware \_\_\_\_\_ or software plugins, to simulate this natural phenomenon.

### **Applications**

#### **Simulating natural or creating imaginary ambiance**

Due to the \_\_\_\_\_ nature of ambiance recordings and the poor reverb characteristics of many live rooms and home studios, many engineers choose to record most instruments dry and apply artificial ambiance during mixdown. While mixing, reverb emulators give us more options and control over the \_\_\_\_\_ ambiance of the mix.

final - direct - inflexible - observed - reverbs - absorbed - practice – emitted - units
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### **Actividad 2: Escribir en castellano como leería las siguientes palabras del texto:**

Recording: .....

Miking: .....

Missing:.....

Mixing X 2:.....

Traveling x 2:.....

Being:.....

During:.....

Why is this last word different from the rest?

**Actividad 3: Insertar las tres oraciones a, b y c en las líneas punteadas del texto que sigue a continuación**

**7.6 Artificial reverberation (book on music)**

Artificial reverberation is widely used to improve the sound of recordings, but has a wide range of other musical applications. ....It is a great oversimplification to imitate this process using recirculating, discrete delay networks.

Nonetheless, modeling reverberation using recirculating delay lines can, with much work, be made to yield good results. ....At each point on the walls of the room, many straight-line paths terminate each carrying sound to that point; the sound then reflects into many other paths, each one originating at that point, and leading eventually to some other point on a wall.

Although the wall (and the air we passed through to get to the wall) absorbs some of the sound, some portion of the incident power is reflected and makes it to another wall. ....If at any frequency the walls reflect more energy overall than they receive, the sound will feed back unstably; this never happens in real rooms (conservation of energy prevents it), but it can happen in an artificial reverberator if it is not designed correctly.

- a. *The central idea is to idealize any room (or other reverberant space) as a collection of parallel delay lines that models the memory of the air inside the room.*
- b. *Reverberation in real, natural spaces arises from a complicated pattern of sound reflections of the walls and other objects that define the space.*
- c. *If most of the energy recirculates, the room reverberates for a long time; if all of it does, the reverberation lasts forever.*

**d. Actividad 4: Reflexionar sobre las palabras terminadas en –ing en el texto anterior**