int buf, p = 0, c = 0;
process Producer {
    int a[n];
    while (p < n) {
        \[\text{await } (p == c)\];
        buf = a[p];
        p = p+1;
    }
}

process Consumer {
    int b[n];
    while (c < n) {
        \[\text{await } (p > c)\];
        b[c] = buf;
        c = c+1;
    }
}

Figure 2.2 Copying an array from a producer to a consumer.