```
    % Prepares the elements of the population for the cost and gain function.
    % ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    % Parameters
    % x: population matrix
    % year: year array will be built
    % styles: % A style is a group of congruent radar arrays.
              % They share the same diameter, power, and type (see type on line 18).
    % lambda: Wavelength (meters)
    % ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    % Return
    % C: matrix of values of cost objective functions
    % G: matrix of values of gain objective functions
    % ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

     function [C, G] = get_objectives_function(x,year_built,num_styles,k,lambda)

        % Create matrices of parameters initialized to 0
        diameters = zeros(1, num_styles); % diameters
        powers = zeros(1, num_styles); % powers
        quantity = zeros(1, num_styles); % quantities
        receivers = zeros(1, num_styles); % recievers
        transmitters = zeros(1,num_styles); % transmitters

        % For loop to populate the parameter matrices from the x matrix
        for i = 1:num_styles
            diameters(i) = x(num_parameters*i-1);    % diameters of each style of↙
antenna
            powers(i) = x(num_parameters*i-0);    % transmitter power of each stle of↙
antenna
            quantity(i) = floor(x(num_parameters*i-2));    %  quantity of each style↙
of antenna


            % if/else statement depending on include_monostatic is 'T' or 'F'
            if strcmp(include_monostatic,"T")
                % if/else statement to populate R and T matrices
                % if floor of type does not equal 0 it is considered a receiver
                % if floor of type does not equal 2 it is a transmitter
                % recievers: a boolean vector (1 = reciever, 0 = transmitter)
                % transmitters: a boolean vector (1 = transmitter, 0 = receiver)
                if floor(x(num_parameters*i-3)) ~= 0
                    receivers(i) = 1;
                end

                if floor(x(num_parameters*i-3)) ~= 2
                    transmitters(i) = 1;
                end
            else
                % if/else statement to populate R and T matrices
                % if floor of type is less than 1.5 it is considered a receiver
                % if floor of type is greater or equal to 1.5 it is a transmitter
                % recievers: a boolean vector (1 = reciever, 0 = transmitter)
                % transmitters: a boolean vector (1 = transmitter, 0 = receiver)
                if x(num_parameters*i-3) >= 1.5
```