First, I want to show you the definition of the word ‘peer’ from Wiktionary. The one in the Oxford Dictionary is similar.

**Etymology 2**
From Anglo-Norman *peir*, Old French *per*, from Latin *par*.

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<th>Noun</th>
<th>peer (plural peers)</th>
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<td>1.</td>
<td>Somebody who is, or something that is, at a level equal (to that of something else).</td>
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<td>2.</td>
<td>A noble with a hereditary title, i.e., a peerage, and in times past, with certain rights and privileges not enjoyed by commoners.</td>
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<td>3.</td>
<td>A comrade; a companion; an associate.</td>
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Source: Wiktionary

I think this definition is very clear and explains very well what a ‘peer’ is. I consider most of my colleagues and friends peers despite their actual title or degree. I can walk up to anyone of them and ask them for advice or to review something I did and wrote (and vice versa, of course). ‘Look, is this understandable? How did I present the data or the experimental setup? Is something missing? Can you please check language and spelling? …’ I think, you get the idea.

After reviewing they will come back to me and we will discuss their suggestions, critics, remarks, and other comments. We are both open in this discussion and its outcome, simply because no one depends on the other one. It does not matter if I do not accept everything (or anything at all). My peer does not insist of taking over everything (or anything at all). Sometimes really nice and new ideas can rise from such a discussion, which improve the work (‘Did you think of using this for …?’). We both meet at eye level, true peers, because we know each other – background, experience, opinions, point-of-views on certain things, etc. We know these things, because we are able to find out, since we know who the other person is. We can talk to each other. We can look up work we did before. Etc.

Sometimes my peer-reviewer asks why I did a particular thing in this particular way. I will explain. We discuss. In the end, my reviewer could take along something new from the discussion, as well. Not surprising, since both of us are peers, this whole process provides equal opportunities (learning, improving, …) for both of us.

Now, let us switch to the so-called blind ‘peer’-review process of most journals out there. I send the manuscript to an editor of a journal I want to publish in (indirectly over some very static webpage, but still). In the end the manuscript is forwarded to some reviewers, I do not know. I maybe can assume that the editor at least selected one of the five demanded suggested reviewers – but who knows? Not me, for sure.
While I as applicant (well, suppliant) try to make an effort in writing a nice cover letter, I can hardly expect any salutation or even complete sentences from my reviewers. Do not know if it is my German background or just me, but such things offend and insult me. It shows (to me) that a person does not care at all, because the person has not to. Being harsh, aggressive, ‘bitchy’, insulting, cynical, ironical, sarcastic? No problem on this side.

Suppliantly, I tolerate and accept remarks, comments, critics, and point-of-views without (great) discussion. On top, I will thank(!) the reviewers for their comments and suggestions. I – as others – just take the line of least resistance, the primrose path for scientific publishing.

There was this one reviewer who told me and my co-author not to invent words such as programmatically. I felt young and rebellious. I wanted to send him a free copy of the Oxford Dictionary, but couldn’t – I did not know who the reviewer #3 was. I changed the sentence(s) and avoided to ‘invent’ words. End of rebellion.

Of course, I know that these reviewers are my scientific peers. Well, actually. I do not know. People and Wikipedia tell me that. I cannot check or review the professional expertise of my reviewers.

For fun, consider this: What exactly prevents an editor of Food & Functions to ask Vani Hari for reviewing? Only the editor knows. No one can check. Not during the process. Not later.

The reviewers, however, can check. They have my name and the power of Google, Scifinder, or ISI Web of Knowledge/Science. They can look up my work and see my expertise (or the lack of). This can change their opinion on my manuscript or the way they formulate their comments. I have to guess.

Do I assume the reviewer has a broad but general knowledge in this field but is a novice to this particular technique we are describing in our manuscript? Could insult the reviewer, if I start to explain simple things to him. Do I really want to talk about vocabulary (see above) with the reviewer? Could insult him, if a German tries to explain English to a native speaker. Also, a simple comment could mean something completely different depending if the person is an expert or novice to this field. Misunderstanding could annoy the reviewer. Commenting on reviewers comments is like gambling.

Now, may I ask you, my dear reader, where exactly this is peer-reviewing?

Post scriptum, I want to add three things:

- Do not get me wrong: There were some really good suggestions in every review-round. Sometimes they changed a great portion of the manuscript and improved the overall work. But don’t reviewers deserve credit for this?
- I do not consider reviewers ‘gatekeepers’ as some people do. In the end, it is the editor’s decision. The editor could completely ignore the reviews and let the manuscript pass (or not). Editor’s decision. Editor’s responsibility. Editor’s gatekeeper.
- Of course, the main thing is that the system works and there are absolutely no flaws. I mean, could you instantly bring up a single case of fraud? On top, the quality output of ‘peer’-reviewing speaks for itself! Especially, in the most reputable journals, right? RIGHT?