"Hostile architecture" and its confederates: A conceptual framework for how we should perceive our cities and the objects in them

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Abstract

In recent years "hostile architecture" or designs (also called "disciplinary architecture" and "defensive architecture") has become an ever more common feature of our cities. Examples of these designs are benches you cannot sleep on, spikes you cannot stand on, and metal plugs you cannot skate on. These designs have created an outrage among activists and the general population since they have largely been conceived as an attack on the worst-off and there is an increasing academic body of work mostly looking into their design features, the motivations behind them, but also whether and under what condition they should be used.

Although progress has been made on the issue of these forms of architecture/designs, no clear definitions currently exist for "hostile architecture," (etc.) and their related concepts, which are especially concerned with their respective environments, such as a "hostile environment." As a result, there has been no clear discussion of how these concepts relate to each other and also to morally permissible and impermissible actions, which many times lead the discussion astray. In this paper I try to amend this by defining the central concepts, as well as showing how they relate to each other and morally permissible and impermissible actions.

Keywords: hostile architecture, defensive architecture, disciplinary architecture, definitions

Résumé

Ces dernières années, les « architectures hostiles » ou conceptions (également appelées « architecture disciplinaire » et « architecture défensive ») sont devenues de plus en plus courantes dans nos villes. Des bancs sur lesquels vous ne pouvez pas dormir, des pointes sur lesquelles vous ne pouvez pas vous tenir debout et des chevilles métalliques sur lesquelles vous ne pouvez pas « skater » sont des exemples de ces conceptions. Ces conceptions ont créé un scandale parmi les activistes et la population en général, car elles ont été en grande partie conçues comme une attaque contre les plus démunis. De plus en plus de travaux universitaires examinent principalement leurs caractéristiques conceptuelles, leurs motivations, mais aussi si et dans quelles conditions ils devraient être utilisés.

Bien que des progrès aient été accomplis sur la question de ces formes d'architecture / de conception, il n'existe actuellement aucune définition claire de « architecture hostile » (etc.) et des concepts associés, qui concernent particulièrement leurs environnements respectifs, tels que « architecture hostile ». En conséquence, il n'y a pas eu de discussion claire sur la manière dont ces concepts s'apparentaient les uns aux autres, ni aussi à des actions moralement admissibles et inadmissibles, qui souvent égarent la discussion. Dans cet article, j'essaie de modifier cela en définissant les concepts centraux et en montrant comment ils se rapportent les uns aux autres et aux actions moralement admissibles et non autorisées.

Mots-clés: architecture hostile, architecture défensive, architecture disciplinaire, définitions

Introduction

Recently, discussions have multiplied and outrage has intensified regarding what is often labeled *hostile architecture*, that is, designs in public spaces designed to make certain actions impossible, or almost so, in the spaces they occupy, for example, benches one cannot sleep on, spikes one cannot stand on, and metal plugs one cannot skate on. This phenomenon has been discussed in important international media venues, such as *The Guardian*, BBC, and CNN, among empirical scientists. Judgments have been overwhelmingly negative (Lockton 2011; Petty 2016; Smith and Walters 2018), as well as by philosophers who have either argued against such architecture (Rosenberger 2017).

Although progress has been made on the issue of these forms of architecture/design, no agreed-upon definitions currently exist for *hostile architecture*, also called *disciplinary architecture* or *defensive architecture*, and related concepts that are especially concerned with the respective environment, such as a "hostile environment." As a result, there has been no clear discussion of how these concepts relate to each other and also to the question of morally permissible and impermissible actions, which, in many instances, leads the discussion astray. For example, it is often assumed that hostile architecture contributes to a hostile environment, making its use morally wrong (Petty 2016; Rosenberger 2017, 2019), an argument that is far from clear when you tease these notions apart.

This paper, therefore, will help clarify the discussion about "hostile architecture" (etc.) by defining the central concepts, as well as by showing how they relate to each other and the question of morally permissible and impermissible actions. To do this, I will use the only framework I have seen for analyzing and constructing concepts in the field of social sustainability (de Fine Licht and Folland 2019) where in which "hostile architecture" etc. operate. Ensuring a clear and concise conceptual scheme will further discussions of the conceptualization and evaluation of "hostile architecture" and the related concepts. Additionally, it will contribute to our ability to produce and analyze definitions in the area of social sustainability in general, which will give us a better idea regarding how to design our cities. However, I will not discuss every possible hostile (etc.) design out there since that would be a too vast endeavor and is being done excellently elsewhere.

I will begin with the criteria of adequacy for definitions of these concepts; however, I will neither defend nor describe them at length (Brülde 2000, 2007; de Fine Licht and Folland 2019). Next, I will define "hostile," "defensive," and "disciplinary architecture" and "environment." Finally, I will relate this conceptual scheme to morally permissible and impermissible actions, and end with the outlook and offering some concluding remarks.

Conditions of adequacy

We always produce or analyze definitions with certain purposes and aims in mind, which, in turn, may yield different conditions of adequacy pertaining to the definitions in question (Brülde 2000, 2007; de Fine Licht and Folland 2019). In the case of defining "hostile architecture" and related terms, our aims are both practical and theoretical (Figure 1). They have to do with, in broad terms, the twofold desire to understand the existence and effects of such architecture and to be able to handle questions about it more wisely.
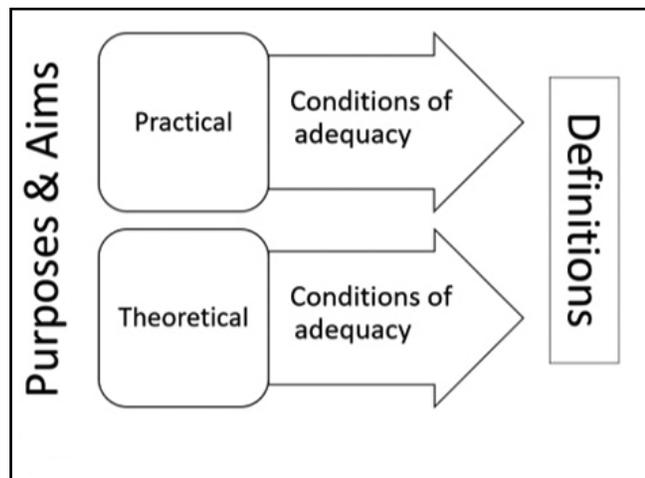
When creating definitions entails both practical and theoretical aims, including that they should be able to be used by policy makers and scientists, Folland and I have argued elsewhere, that the definitions need to be coherent (not yield conflicting results), precise (measurable in principle), reliable (measurable in practice), and comparable (enable comparisons at different levels) (de Fine Licht and Folland 2019).

There are also benefits to producing a simple definition that makes it easier to measure outcomes. Thus, our definition of "hostile architecture" (and related terms) will be created while taking into consideration the conditions of *coherence, precision, reliability, measurability, and simplicity* (de Fine Licht and Folland 2019).

Additionally, the definition should capture what

Figure 1

most of us (after consideration) ordinarily mean by "hostile architecture", including its positive and negative points. This is to avoid the definition excluding important aspects of the concept and people misinterpreting the term. Therefore, we also need to fulfill the conditions of *ordinary language* and *value*. To fully satisfy the former, a definition should accommodate or enable us to explain (1) judgments about what count as prime cases of hostile architecture, (2) disagreement and uncertainty about specific instances of hostile architecture, and (3) comparative judgments about what should be considered more or less "hostile" (de Fine Licht and Folland 2019).

Finally, the definition should also fulfill the conditions of *amorality* and *normative adequacy* (de Fine Licht and Folland 2019). The core of the amorality condition is that we not have an all-considered reason against utilizing, e.g., hostile architecture. Instead, there might be good reasons for implementing it although it seems that this is rarely so (see Section: "How decision-makers should handle different types of designs and environments").

Given our purposes, we also need to have *concepts* with a *practical use*, which, in turn, entails the context for their use. Therefore, different concepts will be devised, in part, with an eye to their usability and considering the role they could reasonably play to fulfill the condition of normative adequacy. Thus, we have the following eight desiderata listed in the table below.

Desiderata	Reasons for revising the definition (X)
Ordinary language condition	X is inconsistent with or does not provide a satisfactory explanation in ordinary language
Precision condition	X cannot be determined, in principle, in categorical or dimensional terms
Value condition	X fails to capture the values ordinarily associated with X
Reliability condition	X is not easily determined, in practice, in observational or in other terms
Measurability condition	X is not ordinally comparable between objects
Simplicity condition	X is a disjunction of different criteria, or the core concept of X is not identified
Condition of normative adequacy	X does not help us promote the values we aim to achieve
Amorality condition	X gives us an all-considered reason not to implement "hostile architecture" (etc.)

Definitions

Here, an attempt is made to define three terms that are used in the ongoing debates in this field: "hostile architecture", "defensive architecture", and "disciplinary architecture" (de Fine Licht 2017). These will be discussed separately and together with the notions of their related environments (hostile environment, etc.).

To set the stage properly, we will focus on "hostile architecture" and "hostile environment" since they are the most prevalent in the debate and a good starting point for other reasons related to the pedagogical structure of the paper.

There are, of course, other terms used in the debate, among which "unpleasant" or "exclusionary architecture/design" are the most important and common ones (Savičić and Savić 2013; Chellew 2019). The definitions of these terms will be discussed below, and it will be shown how they tie into the definitional framework of this paper.

3.1 "Hostile architecture" and "environment"

In psychological research and in legal studies "hostility" is generally understood as either an attitudinal- or a behavioral construct, or a combination of the two (Eckhardt et al 2003; Walters 2014). When we are hostile towards someone (or something) it could be understood as us harboring a deep-seated ill will towards that someone (or something) and thereby perceiving them as a proper object for reactive attitudes, such as resentment, contempt, anger, and outrage, (Strawson 1974). When acting in a hostile way we simply subject that someone (or something) to the reactive attitudes typical of harboring deep-seated ill will, which in turn can take number of forms in terms of actions from, for example, the lifting of an eyebrow, shouting, to physical violence.

Thus, being- and acting in a hostile way can have severe consequences. However, even so, being hostile toward someone can sometimes be judged as proper or even morally obligatory. For example, if my closest friend is betrayed and humiliated by her husband for no good reason, it might be proper for me to feel and display hostility toward him. This reaction could be based on my relationship with my friend and the fact that he is morally responsible for a wrongly committed act, thereby blameworthy for doing what he did, and hence deserve to be treated accordingly.

Now, whatever the justification for acting in a hostile way might be, it should be noted that the purpose of acting in this way is actually to harm the object we are hostile against, or at least if the object is harmed when we are being hostile, this is not something we regret. After all, if we for instance were to be hostile toward someone and they did not even notice it, or was not at all affected by it, we would not be happy about that outcome, *ceteris paribus*, but think that we had failed in some way.

Nevertheless, since hostility is actually meant to harm, or at least not acknowledged as a negative outcome at the time the hostility occurs, through, for example, making them worse-off in terms of wellbeing or treating them with disrespect, which we generally have an obligation not to do, we need to have good reasons in order to treat the object of our hostility in this way. This is why, for instance, when Donald Trump went after Senator McCain in his presidential campaign on very spurious grounds, showing ill will and sending reactive attitudes his way, this was frowned upon by almost everyone, with the exception of Trump's staunchest supporters.

Agential hostility can also be explicit (something the agent is aware of) or implicit (something the agent is not aware of). When someone, for instance, is screaming on the top of their lungs "I'm not angry", there are cases when the person screaming is actually angry, even though they at the time does not recognize this by themselves. Similarly, we might be hostile and display reactive attitudes even though we do not understand that by ourselves.

Correspondingly, we can portray "open" and "concealed" hostility. In a meeting, for instance, I can openly show my deep-seated ill will towards someone by giving several rude remarks, or I can be more subtle, being hostile in a more concealed way by, for example, ignoring what that person says while boosting others without being obvious about it. Thus, we will always need to do some interpretive work in order to understand if someone is hostile or if something else is going on.

Of course, the fact that hostility can be implicit and concealed makes it less straight-forward to judge whether someone or something is hostile or not. Yet, since these possibilities lies at the concept core, and it would be hard to see that we would get what we want out of the definition if we took those way because of measurability or reliability reasons, they will be implemented in the definition even though this makes the results of applying the definition a bit more controversial.

Likewise, our hostile attitudes and acts always has an object even though these objects can range from, for instance, the whole universe, individual groups-, people- behavior, non-human animals, or a single physical object. I can, for example, be hostile towards littering, the group who litters, individuals who litters, or all three. Of course, making littering my enemy might make individual litterers my enemies too. But I might also perceive them as a bit negligent and inculpably ignorant about the importance of not to litter. Since it might be different upshots and problems depending on where the hostility is focused, it is always important to examine what the object of hostility is.

We are also often talking about objects and environments as being hostile without any agential involvement. Take for example deep space. It is not strange to say that this deep, empty, cold void is hostile towards us. Of course, just because we say things like that, we do not necessarily subscribe to an idea about divine creation with a creator with malicious intent. What we could mean instead is rather that deep space is a place not conducive to human life and flourishing because it treats us in a relevantly similar way to when agents are hostile towards our presence. It feels like space hates us and wants to kill us through strangulation, subjecting us to extreme cold or heat, just to mention a few examples, which could be construed as hostile acts on the higher end of the spectrum.

Now, even though it is an interesting question whether physical objects and nature itself can harbor attitudes and act in certain ways, I am not saying anything about the metaphysics here. What we should agree upon instead, it seems to me, to get a useful definition which captures a morally important aspects of design, how we talk about it, and what we value, it is enough to concede that an object (or an environment) can display hostility if it is interpreted in that way by the user, in combination with, for example, a reasonable interpretation of the attitudes of the makers and society as a whole, or that the objects or environments have the effects relevantly similar to the effects of hostile treatment. So, if for example a group judges an environment to be hostile, and there is a plausible story about how this emanates from the deep-seated ill will among the decision-makers towards this group, then this environment should be defined as hostile if there are no reasonable arguments against this view.

Accordingly, an object or an environment can be defined as hostile if they are produced with explicit or implicit hostile intent or if the object, or the environment, treats us in a hostile way. Of course, this implies that you could, for example, produce a hostile environment with no hostile intent, a friendly environment with hostile intent, and so on. Even though this might seem strange, that, for example, an environment can be hostile even though you had no hostile intent when creating it, it seems reasonable given how we generally think about similar matters in other areas. For example, a work of art "lives its own life", it can be interpreted in different ways and used in different ways, after it has left the artist, and something similar seems to be true is true here.

Last, acting in a hostile towards someone or something does not necessarily imply that the hostile party believes that her reactive attitudes will, for example, make the person go away, or stop doing what she is doing. Instead, we might display hostility because we want to treat people in the way they deserve, which might be to, for example, treat them with contempt, humiliating- or ignoring them. So, even though it is undeniably true that hostility is often expressed because, for example, the agent expressing it wants to modify people's behavior or motivational structures in certain ways (etc.) (Björnsson and Persson 2012), it is not true that this is necessarily the prime justification for being hostile in the first place.

With these reflections in mind, the definition of hostile architecture/design/environment is the following:

> *Hostile architecture/design/environment*: x should be judged as "hostile design/architecture/environment" when x by proxy of an agent or by x itself displays (explicit or implicit/openly or concealed) ill will through reactive attitudes, or relevantly similar correlates, toward y (e.g. agents/behaviors/non-human animals) and try to harm y, or not caring if y is harmed, by this display of ill will at the time the hostilities occur.

A prime example of what is considered hostile architecture is the so-called "anti-homeless spikes" hindering people sleeping and standing on a particular spot (Figure 2) (Petty 2016). Using the definition of hostile design above it is easy to explain why we consider these to be particularly hostile. First, they only have one use: to make people not to sit or to sleep in that area. Since there are almost only homeless people who use these areas in that way, it is easy to understand who the target is. Second, when you take away something important from someone (for example one's place to sleep), and do not even bother to embellish it, that is often a sign of contempt. Third, spikes are also used to fend off unwanted animals (Savić 2013), and when human beings are "treated as animals", this is often a sign of disrespect. Last, among important parts of some of the communities where these spikes have been put up, those who have been targeted has been seen as a mere nuisance and not victims of structural injustice or bad luck by those who are in charge. Hence, there is a plausible link between the perceived hostility of the spikes and the attitudes among the decision-makers who have put them there.

Thus, there are at least some good reasons to believe that the spikes show deeply seated ill towards the homeless and since
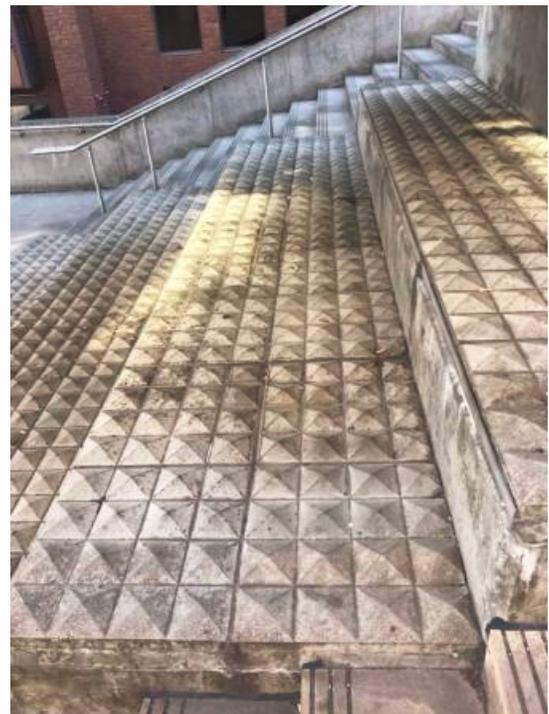

Figure 2
Below the Millennium Bridge, London, England

many people believe that this is grossly unfair, this can explain the uproar against them.

To clarify further, we can think about designs that, despite all displaying the *same function* (e.g., benches we cannot sleep on), would nevertheless lead us to only judge some of them as hostile. The unsleepable benches that are most often considered hostile are those placed in public areas, such as in hubs for public transport or by sidewalks (Figure 3), on which one cannot sleep or even sit for a long time. In this case, whether these benches should be considered hostile, probably in part depends on the intention of the designer and the planner who has put it there (with a presumably conscious or unconscious hostile intent) in combination with the interpretations of those who have nowhere to sleep except in public.

Compare this with two other types of benches on which sleeping is impossible or nearly so. In many old natural reserves in Sweden, you can see a wide range of "unsleepable" benches (Figures 4 and 5). These can hardly be judged to be hostile; instead, people probably see them (both those who have homes and those who do not) as very friendly since the intention was not to rob people of a place to sleep but rather to provide a place to sit and rest (Figure 4), or to create face-to-face interaction and, thereby, a sense of community (Figure 5). In all these cases, the producer's (and planner's) intentions probably play an important role in our judgment of an individual design even though the functioning stays the same.

Figure 3
Location unknown

However, it should be noted that objects can be hostile *even though the producer did not intend them to be*. For instance, someone who produces unsleepable benches may be inspired to do so by other benches on the market, to serve the purpose of cleanliness, or something similar. Still, if these benches *are used* to fend off the homeless, and these *people interpret them* as society's way of showing *contempt* for those living on the street, and many people in society actually do feel contempt towards them, then we would probably judge the bench to be an instance of hostile design and this can be explained by the fulfillment of some of the criteria for hostility above.

The definition of *hostile architecture* above can also easily explain why people disagree about whether something is hostile or not but also why this might be unclear. Take, for example, the chairs that are more and more commonly used instead of benches in playgrounds and other areas (see Figure 6). These objects can be interpreted as hostile towards sleeping there and that this hostility is aimed at certain groups, which in this case, again, are homeless

Figure 4
Outside Gothenburg, Sweden

Figure 5
Kinnekulle Natural Reserve, Sweden

people, people who have mental issues, problems with drug addiction, and other underprivileged populations.

On the other hand, the purpose of these objects can be interpreted as giving planners more options when trying to create an area where people can relax and socialize while not having to sit next to strangers, as well as be able to read a book or engage in some other individual activity in a public space. This also rings true when thinking about the Swedish cultural context where there is a strong sense of personal space and where you would never in other similar circumstance, sit beside someone you do not know if you do not have to. Thus, the intentions in these cases are unclear and the cultural contexts seems to be compatible with both hostile and non-hostile intent, and so we can come down on different sides of the argument, which relates back to the definition of "hostile architecture". Thus, the definition of hostile design can explain why we might disagree about whether a single object is hostile or not.

Figure 6
Södra Älvstranden, Gothenburg, Sweden

According to what has been said so far, the definition of hostile design has a lot going for it. One problem, however, with this definition is that it might be considered not to fulfill the conditions of *precision, reliability,* and *measurability,* while because it is both simple and coherent, these two conditions are certainly fulfilled. However, the problem is that it seems impossible to keep the core features of what we actually mean and value when talking about these architectural styles while, at the same time, fulfilling the precision, reliability, and measurability conditions.

Since it would be meaningless to provide a definition of the term *hostile architecture* (etc.) without its core features, we need to sacrifice a bit of precision and so forth in order to keep talking about people's actual concerns. Moreover, a wide range of the factors discussed when it comes to hostility are at least sometimes observable, comparable, etc. For example, if the design of a functional object expresses a certain degree of contempt for certain groups, then there will be some observable empirical evidence for thinking that it represents an instance of hostile architecture. (The same reasoning applies to the definitions presented the section "Defensive architecture" and "environment" and the section "Disciplinary architecture" and "envrionment").

Thus far, we have only considered hostile design in and of itself. We also need to discuss a hostile *environment*, which can be created both through the presence or absence of objects in a certain location; moreover, an object in one place might make another location seem hostile. In the debate, the notions of hostile architecture and hostile environment are conflated and believed to go together, but this is not necessarily the case.

Indeed, a hostile design can make an environment in a certain area hostile, but not necessarily so; indeed, it can even have the opposite effect. For example, it is common today to use chairs instead of benches to dissuade people from sleeping in certain areas, such as playgrounds (Figure 6). Here, they are easily interpreted as being a part of what makes the playground hostile toward people who want to sleep there, and it is easy to see them as hostile in themselves if we think about their cultural context, in which sleeping in public is frowned upon.

However, assuming that these chairs are hostile, they can, of course, be used to contri-

Figure 7
Chalmers University of Technology, Gothenburg, Sweden

bute to a non-hostile environment. For instance, when combined with benches, architects and designers that I have talked to have said that they can perhaps make a place look more inviting and provide for a wider range of uses (see Figure 7) than if it only had "sleepable" benches. Thus, not distinguishing between the environment and particular instances of design might lead to the wrong judgment concerning the wrong thing.

There might also be laws, policies, and infrastructures that make seemingly innocent designs either benevolent or malevolent. Consequently, we need an even more contextualized understanding to judge whether a place qualifies as a hostile environment in a way we do not when examining what should count as a hostile design object. Undoubtedly, this makes the concept less precise, but it seems clear enough, with the huge upside of retaining the word's original meaning and values.

Furthermore, the environment can be hostile even if *devoid of any hostile objects* or even objects in general. For example, a common way of trying to keep people from hanging around in shopping malls without purchasing anything is to remove the benches for sitting and relaxing. These missing functional objects have been instructively termed *ghost amenities* (Chewell 2019)(Figure 8). In this case, the area where the bench used to be is an instance of hostile design. Similarly, when talking about design in a more general sense, measures such as playing loud or unap-

Figure 8
Masthugget, Gothenburg, Sweden

pealing music in the vicinity of the targeted group, using certain types of lighting to make pimples and blemishes more evident, or turning on sprinklers where people used to sleep can be instances of hostile design.

Finally, designs in one location might create a hostile environment in another. For example, in the city of Gothenburg, there were complaints about people sitting and drinking alcohol in Olskroken Square. In response, a two-minute walk from the square but divided from it by two big roads, the city built a wind shelter called Las Palmas (Figure 9) to communicate to the people drinking alcohol that they should sit there instead. The message was

successfully communicated, and the group, to a large extent, convened at Las Palmas in its place. Here, we could argue that the city made the *square* hostile by setting up the wind shelter *outside* the square; assuming that this was so, then it seems reasonable to think it produced hostile effects in a place other than its location.

That certain designs/architectures are problematic in some contexts while being completely benign or positive in others is something that is beneficial to understand and conceptualize. This especially since it seems to be of greater moral importance to create non-hostile environments (if that should be an aim) than to think about particular designs that might be hostile in themselves. The moral priority when it comes to avoiding creating hostile environments in public and semipublic

Figure 9
"Las Palmas" outside Olskroken Square, Gothenburg, Sweden

spaces is reflected in the literature, where much research has been undertaken to investigate how, for example, shopping centers and public squares have been made difficult to inhabit for those who do not have any money to spend (Crawford 2011; Smith and Walters 2018; Lehr 2019).

Last, one implication of the definition of "hostile architecture" and "hostile environment" is that when we talk about such designs or environments, we need to discuss *what* and *whom* they are hostile *toward*. This is a major benefit of these definitions since we, the discussants, are forced to speak in more concrete terms, which will make elucidating the relevant moral aspects easier. For example, in many contexts, it would be much more controversial to design against a group than a behavior. Admittedly, there might be things, such as hostile environments or objects, that are hostile toward anything we can think of and, therefore, are hostile in general. However, this will be easier to bring forward by examining a wide range of instances where the environments or objects are hostile.

"Defensive architecture" and "environment"

When we talk about providing "defensive measures" in ordinary language we often think about measures put in place in order to avoid undesirable outcomes while trying to avoid other negative side-effects (etc.) because of the measures taken to avoid these outcomes. These measures are often accompanied with a sense of regret, disappointment, and sadness, instead of being imbued with reactive attitudes such as contempt and resentment as when we are taking hostile measures.

For instance, there are defensive strategies for handling climate change that involve building dams, walls, and huge pumping stations to avoid the flooding of cities by extreme weather and rising water levels. These strategies are something most of us would like to be without, and we try to compensate for what ill these brings, but as it stands, when we have decisive reasons in favor of pursuing these measures, we try to go through with it. Thus, in comparison with when preforming hostile measures, we would not go through with measures that could not avoid the outcomes, which is not true when it comes to hostile measures.

Of course, people sometimes worry that these efforts to make our cities resilient to climate change might potentially decrease our incentive to act on the core issue. This is not to say that most people judge such measures as morally wrong *per se*. Rather, they think the focus of such building projects is wrong and should lie elsewhere. Either that or they have other reasons for objecting to such infrastructure projects, judging them to be improper because they are ugly, crowd out other, more important things, etc.

There is, then, a morally ambiguous notion built into the concept of "defensive architecture". According to the conditions of *ordinary language* and *value*, even when used properly, there remain reasons for us not to want to use it at all. However, when employed properly, it is not morally wrong to use such architecture; it might even be morally obligatory, although we might not want to use it in the first place.

Furthermore, and this is why it is important to distinguish between *hostile* and *defensive*, according to many normative theories and widespread understanding as well, there is an *important moral difference* between being *hostile* and being *defensive* as these notions are described here. When we are using hostile measures, we subject agents to reactive attitudes without necessarily trying to achieve certain outcomes besides harming them, or we have a certain outcome in mind, but we do not care at all that we need to harm people in the process. When we use defensive measures instead, we avoid using any reactive attitudes, try to mitigate or compensate for negative effects, and are primarily interested in achieving certain outcomes.

To understand this better, we can compare it with a case from health care. A doctor is, in most countries, and according to most normative theories, allowed to subscribe painkillers to someone in severe pain even if the doctor can foresee that this will lead to a premature death of the patient. Given that the doctor has no other options in order to relieve the pain of the patient, and does not seek to kill the patient or try to kill the patient to relieve her pain, but instead just sees this as an unfortunate side-effect of the treatment, then it is allowed and sometime even morally obligatory to do so (Beauchamp and Childress, 2001).

Now, there are countries and normative theories that allow euthanasia, i.e., that allow doctors to kill the patient intentionally, but in the countries where this is allowed, there are other and often far more stringent demands on when it is permissible to actively help someone to die versus letting someone die due to an unfortunate side-effect. By analogy, the same would probably be true in the context of this paper as there might be cases where hostile architecture is allowed, but these cases would also be required to meet other and much more stringent demands than would be necessary for defensive architecture in order to be morally acceptable.

There are reasons to believe that the distinction between hostile and defensive architecture will be of practical use as well; hence, both will fulfill the condition of normative adequacy. During my years working with social sustainability in urban development, I encountered and worked with many practitioners who were acutely aware of the effects of the development processes they conducted and the results of these processes, and they tried to do the best they could under the given circumstances. Of course, the circumstances are not always optimal, for instance, trying to create safe spaces through different design measures at bus stops to make them safer for some of the worst-off in society who only have access to public transport as a means of travel. Although creating such spaces might be the only alternative for these practitioners, they nevertheless regret that they need to do it.

However, I have also met practitioners who are completely uninterested in questions of social sustainability and are only interested in creating a nice place for (middle- and upper class) people to hang out. *Prima facie* at least, it seems that the former group produces defensive architecture, while the latter group produces hostile architecture. Since these two attitudes, in combination with actions, have different moral valences, this distinction between hostile and defensive architecture is useful to make when discussing a specific design or area.

With this being said, the definition of "defensive design/architecture/environment" is as follows:

> *Defensive architecture/design/environment*: *x* should be judged as defensive "architecture/design/environment" when *x* by proxy of an agent or by *x* itself tries to halt an outcome *O* through the means *M* while *not* displaying ill will toward any *y* and trying to mitigate or compensate for the negative effects on *y* because of *M*.

There are plenty of defensive designs in our cities. Think, for example, about buildings designed to have "eyes on the street." (Jacobs 1961). They have windows located so that people can easily see what is occurring on the street, and people on the street can see them looking. This is thought to help reduce crime and make people feel safer. Of course, architects might resent having to think about these considerations when building cities; nevertheless, we would like to get rid of crime and other abuses, after all, and as it happens, we live in a world with crime, and as long as it exists, we must plan accordingly.

In the case with eyes on the street as described here, there is no hostility involved, just an attempt to avoid certain outcomes. Something similar might perhaps be said about the anti-tampering devices installed on fire posts (Rosenberger 2017). It is something that is installed without (we might assume) any hostile intent. There is just a need to contain the flooding of water in different areas, and there are no other practically applicable ways of achieving it. Or, take the crime prevention through environmental design (CPTED) framework (Cozens and Love 2015). Many of the measures provided in this framework, such as cars and entrances should be located where everyone can see them, could be perceived as defensive instead of hostile and can be assumed to be implemented with no hostility in mind.

When discussing defensive environments instead, a great example of this is the initiative, "the carpet of the red rose," by the city of Malmö in Sweden. The city found that about 80% of those who used public spaces were male and 20% female. In order to change this somewhat, the city decided to redevelop a parking lot into a space that would mostly attract women and, to some extent dissuade men from going there. The process was user-oriented, so a lot of women who lived in the neighborhood were involved, and they decided on, for instance, using a lot of red and pink, a lot of lights, etc.

These measures where both supposed to attract women while having the opposite effect on men. Of course, most women have no inherent hostility toward men, and most men do not interpret a pink area to be hostile to them, etc. These are, instead, measures we have to use if we want to create a more equal use of public space. Thus, there was a need for creating an environment where men as a group was less keen on to occupy, while there was no deep-seated involved against them involved.

The problem here is that the *ordinary language condition* might not be fulfilled to the fullest extent. The term *defensive* could easily conjure up images of barbwire fences and the like, leading to the incorrect impression as these probably should be considered hostile, but this also suggests that we might not have as sharp a conceptual boundary as necessary between "hostile environment" and "defensive environment." This does not seem to be true, however, since when it comes to the *ordinary language condition*, the important thing is to capture the *core* of the concept's meaning, and the definition clearly does that. When people apply the conceptual scheme, they will see that the residual notions can be captured by the other definitions instead.

Furthermore, even though it will be hard to separate the two notions in some cases, in most cases, it will often not be that difficult, and when it comes to the hard cases, the discussions about whether the environment should be considered defensive or hostile will become productive for both sides of the argument. Assuming the framework is used to discern whether something should be considered hostile, and the discussion is performed constructively, this approach will be much more productive than having more precise concepts where the intended meaning and values of the words connected to them are compromised; hence, the condition of normative adequacy is fulfilled.

Last, the existence of some difficult cases actually speaks in favor of the definitions here. It is probably true that the difficult cases will be those in which people disagree about *empirical claims* such as what the intent was, how the people affected tend to interpret the designs, etc., and not that there is a conceptual overlap or vagueness in the definitions themselves. It is true, however, that the reliability condition might not be fulfilled. The same argument regarding this problem, which was described at the end of the section "Hostile archtecture" and "environment", applies here as well.

There are two other terms often used in the debate that have connotations similar to *hostile* and *defensive design*, namely, "exclusionary" and "unpleasant design". (We will discuss *unpleasant design* in the next section.) In ordinary language, when talking about exclusionary measures, measures used against groups in certain places often come to mind. For example, decision-makers in Belgrade might not want to have Roma in the center of the city; for this reason, they might curtail the means of the Roma's livelihood in that place.

The way in which exclusion works, it is, furthermore, compatible with both defensive and hostile intentions. It seems that intentionally trying to "get rid of" a certain population is inherently hostile, while it seems that some CT-PED measures might be exclusionary while being defensive. Thus, using the term *exclusionary* could be compatible with both of the definitions described so far, and we might therefore use them interchangeably. However, since there is an important moral difference between hostility and being defensive, there are reasons in favor of using these terms instead of using the single term *exclusionary*.

"Disciplinary architecture" and "environment"

Finally, "disciplinary architecture/design" and "disciplinary environment" must be discussed. According to ordinary language and value, *discipline* might denote something positive or negative, while at the same time, in many cases, being paternalistic.

Our children might need to be disciplined to become responsible adults even though they, as individuals, do not recognize this by themselves. This does not necessarily imply physical violence, which many today find excessive or a violation of children's rights. However, they might be told when they have done something wrong and suffer some related consequences. Nevertheless, the goal of providing discipline is not, at least not always, to give ourselves, our children, or our subordinates the treatment they deserve. Rather, it has to do with molding someone in a certain way for the future, which again differs from the other modes of design discussed in this paper.

To illustrate how this form of discipline can be enacted in urban design and planning take ancient Rome as an example. The leading magistrates did not allow the building of permanent theaters in the city for a couple of centuries after demand rose because they wanted an environment where people grew up to be manly warriors, not soft ("Greek") city slickers.

Something similar can be said about churches or very pious Christian environments (see Figures 10 and 11). The estate of the late Dag Hammarskjöld, former United Nations president and a devout Christian, was a place to meditate and discipline oneself. It is not difficult to see in Figure 10 that the bench is so narrow and uninviting as to make the sitter aware of the surroundings and even while sitting, make the sitter's body a little stronger and healthier, with a mind aware of its surroundings (i.e. God's creation).

This is also true for the 11th-century bench in Figure 11 outside the church in Skara. You could sit down and rest, but there is no room for idling. Modern "standing benches" at many train stations (see Figure 12), where we get some moderate exercise while waiting for the train, provide a similar example. Something similar could perhaps be said when blue lights are used to prevent heroin use: it is not that there is any hostility involved, it is just that those who have set them up want to make the targeted group less prone to taking these kinds of drugs.

Figure 10
Hammarskjöld's estate, Sweden

Figure 11
Varnhem, 11th century church, Skara, Sweden

With all this being said, we arrive at the following definition:

> *Disciplinary design/architecture/environment*: *x* should be judged as disciplinary "architecture/design/environment" when *x* by proxy of an agent or by *x* itself *x* tries to mold the motivational structure of *y* toward specific ends *E*.

In addition to that this this definition can explain why we judge designs or environment as disciplinary it can also show why we might have conflicting judgments when it comes to whether something is, for example, hostile or disciplinary in design. Sometimes, it is argued that the standing bench is an instance of hostile design (Savičić and Savić 2013), while it was argued here that it is disciplinary. Of course, the reason this conflict of judgment is possible is that we might, for instance, have different views on what the intentions behind it were and so on. But then again, if these empirical matters were settled in one way or another, we would know what sort of design we had in front of us.

Now, we could judge these disciplinary intentions to be morally wrong, and sometimes there are good reasons for such claims because, for instance, the realization of these intentions is paternalistic. If people do not want to stand while they are "sitting," they should not have to. However, since we need to admit that quite large groups of people may not share this view, it would be good to have a definition that is neutral (and hence fulfills the amorality condition) with regard to the moral question at hand so that we can talk these matters through (and thereby fulfill the condition of normative adequacy).

Even though you might think all disciplinary architecture *in practice* is also hostile architecture, important diffe-

Figure 12
Norsesund train station, Sweden

rences exist between the intentions of the two designs. For example, disciplinary architecture might not have only the worst-off as its target; instead, it might want to reach everyone, perhaps especially the most well-off. Furthermore, disciplinary architecture might not want to push anyone out of a specific area; it might just want them to use it in a certain way. Standing instead of sitting is just one example of this; the blue light used in, for example, public restrooms in order to dissuade substance abusers (Savičić and Savić 2013: 847–857) might be another. There are also sometimes overarching aims, such as turning people into better consumers (Smith and Walters 2018), which might be perceived as good, bad, or neutral, but not hostile.

As we come to the end of the discussion of the definitions, we should note that *unpleasant design* could be used in order to archive what people wish to achieve with all of the abovementioned designs (hostile, defensive, and disciplinary designs). Rothstein writes about this nicely in his chapter, "The Pleasant/Unpleasant Dynamic: Emotional Feedback as Systemic Topology" (Rothstein 2013). He argues that pleasant and unpleasant emotions are at the low end of the emotional spectrum but that these emotions can be used to control people in a range of different ways (Rothstein 2013: 281; see also Savičić and Savić 2013: 80–257). Unpleasant design, in which design is perceived as a product of an intentional act, is thereby an artifact or "silent agent" that can help to control people's behavior through their emotional responses to these designs.

Now, since pleasant and unpleasant do not imply anything about whether the intent is hostile, defensive, or disciplinary, they fit into our framework of different concepts nicely in that they represent a means of reaching the goals of the three aforementioned design types. For example, we might want it to be somewhat unpleasant to sleep at a bus stop because we want commuters to be comfortable when standing there waiting for the bus to arrive. However, this is accomplished through the significant efforts of those who design this bus stop, and as is common knowledge in the community, there are also other places to sleep; hence, the benches are to be interpreted as defensive through the means of being unpleasant (to sleep on).

However, and as was argued above, since the different designs have different moral valence, it is probably better to stick to definitions presented in this paper such that these morally relevant differences are not lost when we in the next step try to evaluate different designs and environments.

How decision-makers should handle different types of designs and environments

We have three definitions that are similar but relevantly differently devised so that they can be used to inform a discussion among researchers, industry, and decision-makers. What will be outlined here is placement and actions regarding these different designs and environments. The discussion will look at the designers/designs and a subgroup of those responsible for the environment, namely, urban planners; however, a similar line of reasoning can also be applied to many other decision-makers.

Planners and environments

With regard to environments, decision-makers have a *prima facie* reason to avoid producing hostile environments. The reason is that there are few groups that deserve to be treated in a hostile way, and since we might harm people by treating them thus, we should try to avoid it. However, this *prima facie* reason can be trumped by others. The first has to do with treating people as they deserve, and the second with more pragmatic reasons. As for treating people as they deserve (e.g., with respect), this might be applicable to the well-off disrespecting

Figure 13
Gothenburg, Sweden

less-fortunate groups or the ongoing behavior of such groups, despite their having presented reasonable claims to obtain consideration of their rights.

For example, take the case of skate-stoppers (Figure 13). These prevent people from riding their skateboards in a certain spot. Sometimes, these are considered hostile and to produce a "hostile environment," and this can be explained by their hostile signaling. This "hostile environment," hostile toward skateboarding and skateboarders, that is, might, under certain circumstances, be deserved and, thus, at least morally permissible to create. Skateboarders are often well-off middle-class individuals, and their well-being is plausibly not negatively affected but positively so, at least if they can be persuaded to go to a skatepark instead, because they will be at less risk of injury when they ride their boards there (Forsman and Ericsson 2001; Lustenberger et al 2010). Assuming that the community that installed the skate-stoppers has tried to discuss the issues with the skateboarders (e.g., destruction of property and danger to pedestrians) and have received disrespectful replies, the community might be justified in making the environment hostile toward this group. But then again, having been a skateboarder myself, there are pragmatic reasons for favoring other measures since such a conflict might induce this group to remain instead of going somewhere else and, as a result, intensify the conflict.

Another case in which it might be morally permissible or obligatory to create a hostile environment is when it comes to bus stops and similar places where those who are not well-off need to go in the conduct of their daily lives. This case is often rather different from the one above in the sense that here, we often have a conflict of interests among the least well-off. For example, take the fact that the Los Angeles public transport system largely consists of buses. Here, the least well-off are the most frequent users of public transport. Furthermore, bus stops are hotspots for crime (Loukaitou-Sideris 1999). Crime rates seem to fall when these places are designed so that people do not want to hang around them when not waiting for the bus. In this case, it seems at least not to be morally wrong to design bus stops to reduce the crime rate for the least well-off. This should be combined with having a discussion with the people hanging around the bus stops in an attempt to understand what can be done for them and what they think about these issues, assuming that their suffering will not increase because of these designs.

A third case in which it might be permissible to create a hostile environment is when it comes to terrorists and their behavior. For example, a few years back, there was a terrorist attack in Sweden during which a truck was used to mow people down on a shopping street. This prompted planners to install large concrete blocks on such streets in order to make similar attacks more difficult (Figure 14). However, these are often not hostile in nature—quite the opposite. They have, for instance, become extra sitting (and even sleeping) spaces, which makes the area feel less hostile (Figure 14). This is probably because it is difficult to send a signal to the proper recipients without making others nervous, which probably, in general, gives us good reason not to act upon the notion of giving prospective terrorists what they deserve. However, if there were some way in which we could utilize hostile architecture in order to give terrorists what they deserve, assuming that they deserve to be treated with hostility, then this would be morally permissible.

The point of these cases is to illustrate that if we examine or are planning an area, we should try to make it non-hostile. However, sometimes, it is morally permissible because of how people deserve to be treated or other pragmatic reasons to make it hostile instead. However, these cases should be thoroughly argued for since we have a presumption against producing hostile environments. As for disciplinary environments, there are *prima facie* reasons for not creating them if their goals are not in accordance with those of the public when the public has not been directly involved in decision-making. This is because they would be paternalistic in nature (Mill 1892).

Figure 14
Kungsgatan, Gothenburg, Sweden

However, there are exceptions to the rule that we should not act in a paternalistic way, and there are many things the public might desire that require discipline. For example, one could argue that public health might be improved by banning escalators and removing parking lots so that people need to walk more. This might be justified, even if the public would not like these measures, since health is often perceived as beneficial to most of the worthwhile things in life (Daniels 2007). Hence, such minor paternalistic infractions might be morally permissible in this context. However, since we have a *prima facie* reason against producing "disciplinary environments," we must provide good reasons for trying to create them.

When it comes to creating a "defensive environment," we have no *prima facie* reason to do one thing or another. There are always outcomes we would not like to incur, and, as long as they are morally permissible or obligatory, they are something to pursue in the appropriate context.

Figure 15
Uppsala railway station, Sweden

Designers and designs

When it comes to the designers and their designs, their reasoning will be somewhat different from that of the policy makers, which has to do with the fact that designers do not implement their designs, someone else does; hence, they need to consider the eventual use of their designs and make a consequent judgment. However, since few designs are morally prohibited *per se*, there is reason to think there are no *prima facie* reasons against any sort of design, however malignant it may seem. The caveat here is that if a design's sole use were immoral, such as pushing certain people out of an area without good reason, then the designers would have a *prima facie* reason not to produce such a design.

There is reason to believe that designing and producing the benches seen in Figure 3 (and ones of relevantly similar design) are today often conducted in an immoral way, and these artifacts do not contribute anything positive in terms of helping planners to become more flexible in how they design a certain place. If planners want to create an environment, for instance, where people do not want to hang around, then they can use chairs instead of benches, which they sometimes do (Figure 15). There have also been a vast number of complaints regarding the usability of these benches and similar designs from ordinary users and "extreme users," such as people with disabilities. They are simply impossible, or nearly so, to use for the purpose they were designed for, which is for people to be able to sit down on them and catch their breath. Thus, designers and others should be hesitant to produce such benches and similar designs for moral and prudential reasons.

Conclusion

In this paper, three distinct definitions of different modes of design and corresponding environments (hostile, defensive, and disciplinary) have been presented. Within this conceptual framework, we have seen that the discussion of designs is highly complex, they might not be connected in an intuitive way, and moral judgments about them might be equally surprising. For example, "hostile design" is, by its very definition, often considered morally wrong and lead to "hostile environments." We have seen in this paper, however, that this is hardly so. Indeed, "hostile architecture" might lead to an "unhostile environment," and, sometimes, we might have a moral obligation to produce "hostile environments."

Of course, a lot of work remains. For one, this rather negative conceptual framework needs to be related to a more positive one using concepts such as "inclusive architecture," "universal design," etc. There is also a great need for more empirical studies to investigate, for example, why designers produce designs in the first place, how they are used in general, and their effects. It is also important to have a much more thorough debate about the moral issues concerning designs and environments, including when they are right, wrong, and the conditions that determine their

appropriateness. It is hoped that this paper will encourage others to ask these questions, thereby making the field a bit clearer such that the quest for knowledge becomes a bit easier.

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