Abstract: Leibniz holds that created substances do not causally interact with each other but that there is causal activity within each such creature. Every created substance constantly changes internally, and each of these changes is caused by the substance itself or by its prior states. Leibniz describes this kind of intra-substance causation both in terms of final causation and in terms of efficient causation. How exactly this works, however, is highly controversial. I will identify what I take to be the major interpretive issues surrounding Leibniz’s views on causation and examine several influential interpretations of these views. In ‘Leibniz on Causation—Part 2’ I will then take a closer look at final causation.

Leibniz’s views on causality are intriguing in part because they combine elements of medieval theories and of early modern theories into something radically new. One of his most striking claims about causation is a negative claim: he denies that created substances causally interact, strictly speaking. Of course he realizes that this goes drastically against our everyday understanding of the world. It strikes us as obvious that when a dog bites me in the leg, for instance, there is a causal relation between the dog bite and the throbbing pain I start feeling. Leibniz denies that there is such a causal relation and provides an alternative explanation for the correlation of events or things in the world that we ordinarily describe as causes and effects. It is worth noting, though, that Leibniz’s rejection of causal interactions among created substances does not entail that there is no causation in the created world. He in fact holds that all created substances are causally active. That is because even though they do not interact with each other, there is causation within each of these substances. Yet, scholars of Leibniz’s philosophy disagree considerably about the nature of this causality. That is what I will explore in the present paper. I first discuss the question whether there is both efficient and final causation in created substances, and then investigate what kind of efficient causality we might find in them. In ‘Leibniz on Causation—Part 2,’ I take a closer look at the final causes of changes in created substances.

1 Central Questions

Because Leibniz rejects the causal interaction of created substances, it is much harder for him than for many other philosophers to answer two important questions about causation. Take again
the example in which a dog bites me and I subsequently perceive a throbbing pain. To explain this change in my perceptions, we need to understand among other things (a) what causes my perception of pain, and (b) why this perception occurs in conjunction with the dog bite. Philosophers who allow for causal interaction among created substances have a straightforward way to answer both of these questions: the dog bite causes my perception of pain, and that’s why these two things occur in conjunction. What answers the first question already answers the second one as well, on these interactionist views. Leibniz, on the other hand, needs to provide distinct answers to these two questions. I will spend most of the present paper exploring Leibniz’s answer to question (a), that is, the question what causes perceptual changes in created substances. Roughly, as we will see, Leibniz holds that it is my soul itself, or something within my soul, that causes my perception of pain. This answer does nothing to address question (b), however. If the dog bite does not cause my pain, why do they occur in conjunction, and more to the point, why are dog bites like it always, or typically, followed by pain?

Before delving into question (a), let me say a few things about Leibniz’s answer to question (b). It would be exceedingly implausible to claim that all correlations in the world, such as the one between dog bites and pain, are merely coincidental. Leibniz’s solution is that, far from being a coincidence, these correlations are the work of God. Because even before creation God knew all of the changes that would occur in my soul and in the dog if God created us, he also knew that they would correspond perfectly with respect to the bite. Based on this knowledge as well as on his knowledge of all other possible substances, God was able to create a world in which the changes in all created substances perfectly correspond to each other even though these substances do not genuinely interact. This, in rough outline, is what is typically called Leibniz’s doctrine of pre-established harmony: God established, in advance, a perfect correlation among the states or changes of created substances by creating only those substances that he foresaw would harmonize.¹

In fact, because God pre-established this perfect correspondence among creaturely states, Leibniz sometimes claims that his system can accommodate the ordinary way of speaking about the causal interaction among created substances. While it is strictly speaking false that the dog causes my pain, there is a sense in which my pain occurs because of the dog: in a way, God chose to create a soul like mine—a soul that feels pain at this particular time—because he wanted something corresponding to the dog’s bite. God decided to allow imperfections such as my pain at least in part because of perfections like the dog’s activity. A world without imperfections corresponding to these perfections would lack the kind of harmony characteristic of the best of all possible worlds. Hence,
even though strictly speaking there is no causal relation between the dog’s bite and my pain, there is some truth to saying that the dog influences me. Insofar as in the order of divine reasoning the dog’s bite is the reason for my pain, we can say that the dog exerts what Leibniz calls an ideal influence on me (see M §51; T §66).²

I will spend the rest of this paper discussing Leibniz’s answer to question (a), that is, the question of what, for Leibniz, causes the changes in created substances. To be more precise, I will be focusing on the finite or creaturely causes of such changes, setting aside God’s causal contribution as well as God’s causal activity more generally.³ Likewise, my discussion will focus exclusively on the causation of changes at the level of simple created substances, or what Leibniz sometimes calls created monads, bracketing the causality that may occur at the level of organisms, aggregates, or bodies. Created monads include the souls of angels, of human beings, and of animals, as well as the much more primitive simple substances existing everywhere in the bodies of organisms and even in inanimate things. I will be concerned with the causality of each such monad taken individually, but not with the causality that bodies, collections of monads, or extended substances (if there are any) might possess.⁴

What precisely the finite causes of the perceptual changes within simple created substances are, according to Leibniz, is a surprisingly tricky question. Part of the problem, as we will see, is that Leibniz describes this causation in several different and seemingly incompatible ways. Another part of the problem is that he invokes different types of causation—at the very least, efficient and final causation—but does not explain how precisely they work together in the causal explanation of perceptual change. With respect to both efficient and final causation, one crucial but controversial question is what exactly Leibniz takes to be the cause of a change: is it the substance itself, its perceptions, its appetites, or the objects of its perceptions or appetites? Relatedly, there is significant disagreement among commentators about how Leibniz understands final causation, which is a notion with a long and complicated history. I will approach this complex of questions by first providing a preliminary sketch of what efficient and final causation are, then examining whether both of these types of causation play a role in monadic changes, and finally attempting to determine what the efficient causes of monadic changes might be. In ‘Leibniz on Causation—Part 2’ I then examine the final causes of monadic changes more closely, which will also provide us with a more nuanced understanding of what final causation is, for Leibniz.
2 A preliminary sketch of efficient and final causation

Let me, then, begin with a rough preliminary account of efficient and final causation, the two types of causation that Leibniz most frequently invokes. Efficient causation is more straightforward than final causation. Leibniz defines the efficient cause as the active cause and equates it with that which produces, or with the productive cause (NE 228). Accordingly, an efficient cause in the most general sense seems to be that which produces some change through an action. Hence, the question whether there are created efficient causes of the changes in created substances is the question whether something created produces these changes through an action. As we will see below, it is somewhat controversial where Leibniz stands on that issue.

Leibniz’s understanding of final causation (or teleology) is more difficult to figure out. He does not say very much about what final causation is, on his view, and instead appears to presuppose that his readers know what he is talking about. Thus, it helps to take a quick look at traditional understandings of final causation. In the Aristotelian tradition, very roughly, the final cause is the end or purpose of an action or process, or that for the sake of which the action or process occurs. This is easiest to understand in the case of the intentional actions of rational agents. For instance, if I walk into my favorite coffee shop in order to have some caffè latte, the latte—or, perhaps more accurately, the pleasure I expect to derive from it—is the final cause of my action of walking into the shop. I walk into the shop for the sake of consuming a latte, we can say. Walking into the shop, moreover, is the means to this end. There are also actions that are performed for their own sake rather than as a means to something else. Someone might, for example, listen to music simply for the sake of listening to music. In such a case, we can say that the end or final cause of performing the action is the action itself. For at least some Aristotelians, final causation is not limited to the intentional actions of rational agents. They hold, for instance, that natural processes occur for the sake of certain ends. Take the development of an acorn into an oak tree. To fully understand the changes that the acorn undergoes, these Aristotelians insist, we need to invoke the end of all of these changes: being a fully grown tree. This is the acorn’s purpose, and it explains the natural changes we can observe in it.

Speaking very generally, then, the final cause is traditionally understood as that for the sake of which some change occurs, or the end at which some change aims. It is important to note, however, that final and efficient causation are not mutually exclusive. Instead, these two causes—as well as the other two Aristotelian causes, that is, the material and formal cause—are typically understood as working in tandem. Suppose, for example, that a university is building a new library. In order to
explain this, we need both an end or purpose—providing better library services—and construction workers who act as efficient causes and who produce the new building. The way Thomas Aquinas describes efficient and final causation brings this out nicely: “The influence of an efficient cause is to act; that of a final cause is to be sought or desired” (Truth 3:41 [q22 a2 corp.]). The final cause, on this view, is an integral part of the causal explanation, but without an agent who seeks the end and is the efficient cause of some change aiming at the end, nothing happens.

Especially among medieval Aristotelians, there is disagreement about whether, or in what sense, non-rational creatures can be subject to final causation, that is, whether or in what sense they can act for the sake of ends. This question is also enormously important for understanding Leibniz’s views on final causation. I cannot here enter into the interpretive difficulties surrounding medieval theories of final causation, but some general remarks will suffice for present purposes: at least one strand of medieval Aristotelianism holds that all genuine final causation arises, at bottom, from the intentions of rational agents. Typically these philosophers nevertheless describe natural changes such as the acorn’s development in terms of teleology, but they ultimately identify the ends that explain the acorn’s growth with God’s ends. According to this strand of Aristotelianism, non-rational creatures pursue ends merely because God has directed them toward these ends. Only rational agents, on this view, can direct themselves toward ends and thereby act for the sake of an end in the strict sense.10

3 Efficient causation in created substances

Based on this preliminary sketch of efficient and final causation, we can return to Leibniz and to the question whether both of these two types of causation are relevant for the causal explanation of changes in the states of finite substances. This is a contested question among scholars. Leibniz frequently describes the realm of created monads as the kingdom of final causes and contrasts it with the realm of bodies, which he calls the kingdom of efficient causes (M §79; G 7:344/AG 319). Accordingly, some commentators argue that for Leibniz, there is no efficient causation in the realm of created monads. Most prominently, perhaps, Sukjae Lee argues that God is the only substance capable of efficient causality, and that created monads are only the final and formal causes of their states. Robert Sleigh, in at least one recent paper, also toys with an interpretation on which the only causality occurring in created monads is final causation (‘Moral Necessity’ 270).

Other interpreters go to the opposite extreme and claim that, at bottom, there is only efficient causation in created monads and that final causation plays no fundamental role.11 Most interpreters, however,
understand Leibniz as acknowledging both efficient and final causation in created monads. Some point out that when Leibniz contrasts the bodily realm of efficient causation with the monadic realm of final causation, he is simply stressing that the types of efficient causation found among bodies, or the mechanistic laws that govern the interactions of bodies, have no place in monads. This is compatible with holding that there is a species of efficient causation in created monads, in addition to final causation.13

There are a number of good reasons to assume that there must be efficient causation in created monads, in addition to final causation. First of all, final causation is traditionally understood to go hand in hand with efficient causation, as we have seen: in order for a change to occur, there must be not only a purpose or end, but also an efficient cause that acts for the sake of this end or produces something in order to achieve the end. An end or purpose on its own, without an efficient cause, cannot produce anything. The way Leibniz defines efficient causation suggests that he agrees: the efficient cause is that which produces, or that which is the active cause, according to the texts quoted above. It is plausible, then, that Leibniz agrees with Aristotelians that without an efficient cause, no change would be produced. One could of course locate this efficient causality entirely in God. As already mentioned, Sukjae Lee argues that God is the sole efficient cause of monadic changes. Yet, this strikes many interpreters of Leibniz as too close to occasionalism—a doctrine Leibniz explicitly rejects—and it also appears to make created substances more passive than Leibniz often insists they are.14 Leibniz vehemently attacks occasionalism, after all, in part because he holds that substances are essentially active (e.g. ‘On Nature Itself’ §15, G 4:515/AG 165f.). Specifying and demanding a subsequent state, which Lee takes to be the only types of causation of which finite substances are capable, do not strike me as types of genuine activity.

There is also textual evidence that changes in created monads have created efficient causes. Leibniz writes to Guillaume François de l'Hôpital in 1695, for instance, that “every substance … produces for itself, internally, in order, everything that will ever happen to it” (A 3.6.451/WF 56f.). Similarly, he tells Isaac Jaquelot in a 1704 letter, “I maintain that God gave the soul the power of producing its own thoughts” (G 3:464/WF 175). Furthermore, in a 1715 letter to Nicolas Remond, Leibniz first stresses that—against occasionalists—finite substances must be active, then claims that secondary (that is, created) causes are efficacious, and finally states that “each substance or monad … follows its own laws in producing its actions” (November 4, 1715, G 3:657, my translation).15 For these and similar reasons, the vast majority of Leibniz scholars holds that there is efficient causation in created monads, in addition to final causation.
Having determined that creaturely states most plausibly have finite efficient causes, the next question is what these efficient causes are. One thing is clear, as already noted: created monads do not interact causally, according to Leibniz. Instead, all non-miraculous changes in each created monad originate within it. As Leibniz puts it in ‘A New System of Nature,’ “God originally created the soul (and any other real unity) in such a way that everything must arise for it from its own depths, through a perfect spontaneity relative to itself” (G 4:484/AG 143). Hence, the finite cause of changes in me cannot be anything external to me. Something in me must cause those changes. But what exactly? Most interpreters assume that substances in some sense underlie the states or changes that occur in them.16 On that kind of interpretation, there are at least two ways to understand Leibniz's claim that all changes arise in a created monad spontaneously, “from its own depths.” First, one can take it to mean that any state of a created substance—such as, for instance, my throbbing pain—is efficiently caused by a prior state of the same substance. Alternatively, one can take it to mean that the substance itself efficiently causes all of its states. Each of these alternatives has adherents, and both sides can cite some passages in support of their interpretation. I will briefly discuss and evaluate these two possible readings before turning to the question how exactly the causation of creaturely states works.

Let us first consider the possibility that the states of a finite monad are efficiently caused by prior states of the same monad. On this interpretation, monadic states form a causal chain. Because Leibniz appears to acknowledge two basic types of monadic states,17 there are two possibilities for proponents of this kind of interpretation. They can claim that the efficient causes of changes in a monad are prior perceptions—that is, representational states—of that monad, or that these causes are the monad’s prior appetitions, that is, the tendencies of the monad to transition to new perceptions.18 Following Bobro and Clatterbaugh, we can call the former possibility the “efficacious perception view” (408f.), and we can call the latter possibility, which Bobro and Clatterbaugh do not consider, the ‘efficacious appetition view.’ Each of these two possible interpretations has supporters.19

The perhaps most explicit proponent of the efficacious perception view is Nicholas Jolley, who writes, “[a]lthough Leibniz may say that it is substances which produce their states, this is only a loose way of speaking; in strictness, it is perceptual states which causally produce other perceptual states of the same substance” (605). There is some textual evidence in favor of Jolley’s interpretation. Leibniz says in his notes on Stahl, for, instance, that “one can say that the representation of the end in a soul is the efficient cause of the representation of the means [to this end] in the same soul” (Carv 76f., my translation). Here, Leibniz explicitly describes one
representation in the soul as the efficient cause of another representation. A similar statement occurs in Leibniz’s reply to Pierre Bayle’s question of why a dog that is suddenly beaten from behind would transition to a painful state, on Leibniz’s view: “The representation of the present state of the universe in the dog’s soul produces in it the representation of the subsequent state of the same universe” (G 4:533/WF 78). Here again, Leibniz suggests that earlier representations—that is, perceptions—produce later perceptions.²⁰

Several other interpreters endorse what I call the efficacious appetition view. Donald Rutherford, for instance, claims that “[t]he appetitions associated with particular monadic states are productive of new states. Hence they are efficient causes of those states” (‘Leibniz on Spontaneity’ 166; cf. ‘Laws and Powers’ 167). Similarly, Laurence Carlin contends that “appetites, essential constituents of final causes, are efficient producers of subsequent perceptual states” (‘Leibniz on Final Causes’ 231), and Martha Bolton argues that “acts of monads have efficient causes, namely, appetites which are efficacious tendencies” (178). The main reasons in favor of the efficacious appetition view appear to be that Leibniz often describes changes in a monad as the consequences of prior states,²¹ as well as the fact that appetitions are in many ways better candidates for something that is causally active than perceptions. After all, Leibniz appears to view appetitions as forces or tendencies (cf. NE 172f).

Other Leibniz scholars—myself included—reject both the efficacious perception and the efficacious appetition view and argue instead that the substance itself must be the efficient cause of its states. On this interpretation, which Bobro and Clatterbaugh call ‘monadic agency view,’ monadic states do not form a causal chain: neither appetitions nor perceptions efficiently cause anything, and their efficient cause is always the monad whose states they are.²² One reason to adopt the monadic agency view is that Leibniz sometimes claims that only substances can be causally active. In ‘On Nature Itself,’ for instance, he says, “everything that acts is an individual substance” (§9, G 4:509/AG 160), and in the New Essays he notes, “[f]aculties or qualities do not act; rather, substances act through faculties” (NE 174). Moreover, there is some textual evidence that when Leibniz talks of the states of substances as causally active, he is talking loosely and at bottom holds that only the substances themselves can be efficient causes. He writes to Samuel Clarke, for instance, that “properly speaking, motives do not act on the mind as weights do on a balance, but it is rather the mind that acts by virtue of the motives, which are its dispositions to act” (LC, fifth letter, §15). According to this passage, it is always the mind that acts, and mental states are merely its dispositions or motives for acting. Along similar lines, Leibniz says in his ‘Remarks on King,’
“[w]hen we say that an intelligent substance is moved by the goodness of its object … [the object’s] representation acts in the substance, or rather, the substance acts upon itself, insofar as it is disposed and influenced by this representation” (G 6:423 §21; translation mine). I take these passages to be convincing evidence that, strictly speaking, monads themselves—rather than their prior states—are the efficient causes of their current states.

4 Conclusion

For Leibniz, created simple substances or monads do not interact with each other. Yet, there is causal activity within each monad. It was my aim in this paper to explore what exactly this causality consists in. We have seen that there are good reasons to think that the changes in created monads have finite efficient causes as well as final causes. Moreover, on the interpretation I favor, created monads themselves are the efficient causes of all non-miraculous changes in their states. When Leibniz talks as if prior states of a substance efficiently cause its current states, he is merely speaking loosely. One question that I have not explored yet is what exactly the final causes of monadic changes are. I will address that question in ‘Leibniz on Causation—Part 2.’

5 Works Cited


---. For a more detailed discussion of Leibniz’s doctrine of pre-established harmony, see Sleigh, ‘Leibniz on Malebranche.’


---. God’s role in the causation of creaturely actions is an important but complex topic in its own right. Helpful discussions of it include Whipple, ‘Leibniz on Divine Concurrence,’ McDonough, ‘Leibniz: Creation and Conservation and Concurrence,’ Bobro, Lee, Schmaltz, and von Bodelschwingh.

---. For helpful discussions of the causality of bodies or aggregates, see Brown and Miller.
In his ‘Table of Definitions’ from the early 1700s, Leibniz claims that the efficient cause is “the active cause” (C 472; my translation); in another table of definitions from the early 1670s, he defines the efficient cause as “a cause through action” (A 6.2.490; my translation).

There are some interesting parallels here with Suárez’s definition of the efficient cause as “that whence the effect exists by means of an action, that is, … a principle from which the effect flows forth, or on which it depends, through an action” (10 [i.e. Metaphysical Disputations, disp. 17, section 1, §6]).

He does define ‘end’ as “that, an appetition for which is the sufficient cause of striving [conatus] in the agent” (‘Table of Definitions,’ C 472). This is helpful because it tells us that ends are the objects of appetitions. Yet, it does not say anything explicit about the causality of the end.

For a much more extensive discussion of Aristotle’s views on final causation, see Cameron.

For an accessible discussion of Aristotle’s four causes, see Stein.

See e.g. Thomas Aquinas, *Truth* 36; 39; 47 [q22 a1 corp.; ad9; q22 a4 corp.]; *Summa Contra Gentiles* 39 [bk. 3, ch. 3, §7]. For helpful discussions of medieval theories of final causation and their relation to early modern philosophy, see Schmid, McDonough, ‘The Heyday,’ Carlin, ‘The Non-Aristotelian Novelty’ and ‘Boyle’s Teleological Mechanism.’ Aristotle himself seems to hold that non-rational things can exhibit final causation without being directed to ends by a rational agent (see Carriero, ‘Spinoza on Final Causality’ 117f.).

Robert Adams suggests something similar in a recent paper (‘Moral Necessity’ 184; 187), but in his earlier monograph, he appears to argue that there is productive causality in finite substances (*Leibniz: Determinist, Theist, Idealist* 97f.).

The most explicit such commentator is Jonathan Bennett (‘Leibniz’s Two Realms’ 140 and *Learning from Six Philosophers*, 1:270). Bennett is of course aware that Leibniz often invokes final causation when describing the activity of monads, but argues that Leibniz is not ultimately entitled to assigning a genuine explanatory role to final causation.

There is further disagreement among commentators who hold that there is both final and efficient causation in the monadic realm: some think that final causation is prior to, or more fundamental than, efficient causation (Carriero, ‘Substance and Ends’ 128), some think that efficient causation is the only fundamental type of causation (Bennett, ‘Leibniz’s Two Realms’ 139) or that final causation is a species of efficient causation (Carlin, ‘Leibniz on Final Causes’ 231), and yet others think that neither final nor efficient causation is more fundamental (McDonough, ‘Leibniz’s Two Realms’ 685f.; 690 and ‘The Heyday’ 197).

See e.g. McDonough, ‘Leibniz: Creation and Conservation and Concurrence’ 32.

There are other passages in which Leibniz talks of finite substances producing—that is, efficiently causing—their states. See for instance a letter to Burcher de Volder from 1704: “simple substances … cannot act upon one another. Nonetheless, they do produce change in themselves” (LDV 308–9/G 2:271); similarly, T §298: “It is true that when God causes a volition in us he causes a free action. But … [i]t is always we who produce it, good or evil, for it is our action.” See also Leibniz’s ‘New System of Nature,’ where he writes that “the series of representations that the soul produces will correspond naturally to the series of changes in the universe itself” (G 4:485, my translation).

There are notable exceptions. See especially Whipple, ‘The Structure of Leibnizian Simple Substances,’ who challenges this common assumption. For Whipple, a substance just is its perception, which in turn is not fundamentally different from its appetition; moreover, the successive states of a substance are distinguishable only at the phenomenal level (407).
That there are two basic types of monadic states is somewhat controversial. (As you may have noticed, there is hardly any aspect of Leibniz’s views that is not controversial!) Some interpreters think that there is only one basic type of monadic state, with two aspects. See e.g. McRae 60.

For Leibniz’s definitions of perception and appetition, see ‘Principles of Nature and Grace’ §2, G 6:598/AG 207; M §14f. Of course, one could also claim that perceptions and appetitions together produce new states in a substance. Yet, I am not aware of any commentators who explicitly argue this.

In addition, there are some Leibniz scholars who claim that every state of a finite monad is efficiently caused by a prior state of the same monad without specifying whether this efficient cause is a prior perception or a prior appetite (see Sleigh, ‘Leibniz on Malebranche’ 162 and Kulstad 96).

There are also numerous passages in which Leibniz describes the states of created monads as “consequences” or “results” of earlier states (e.g. M §22; letter to Foucher, 1686, G 1:382/WF 52; undated letter to Jaquelot, G 3:468/WF 179; remarks on Lamy, G 4:579/WF 154; remarks on Arnauld’s Letter, May 1686, G 2:57/AG 76). Yet, most of these passages talk only of states generally, not of perceptions in particular, and more importantly, they do not employ explicitly causal language (see Bobro and Clatterbaugh 415). Hence, they are not extremely strong evidence for the efficacious perception view.

See footnote 20.

Bobro and Clatterbaugh argue for this interpretation at length (416; cf. Bobro 329; Schmid 326f. and 340f.).

In the draft of a letter to De Volder, Leibniz moreover says, “there is a certain force in the perceiver for forming new perceptions for itself from prior ones—which is the same as if you said that a new perception sometimes follows from some prior perception” (LDV 337).