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PERSPECTIVES

Chronic Pain and Time – A Theoretical Analysis

Emmanuel Bäckryd

Pain and Rehabilitation Center, and Department of Health, Medicine and Caring Sciences, Linköping University, Linköping, Sweden

Correspondence: Emmanuel Bäckryd, Pain and Rehabilitation Medicine, Linköping University, Brigadgatan 22, Linköping, SE-581 85, Sweden, Email emmanuel.backryd@liu.se

Background: When theoretically discussing pain, the distinction between acute and chronic pain is not always taken into consideration. By contrast, informed by the pain medicine distinction between acute and chronic pain, the present theoretical paper analyses the phenomena of chronicity and chronification in the pain setting.

Methods: Philosopher Fredrik Svenaeus and his paper The phenomenology of chronic pain: embodiment and alienation (Continental Philosophy Review 2015;48:107–122) is used as a dialogue partner.

Results: Three aspects, relevant for clinicians, are discussed: (1) the distinction between emotion and mood, arguing that the process of chronification entails pain evolving from the former to the latter; (2) chronification as a process in which the pain patient becomes aware of his/her temporality, both the past and the future coming to the fore (as opposed to severe acute pain in which only the present counts, ie, getting rid of the pain now); (3) the acquisition of a pain-related narrative identity, interdisciplinary pain rehabilitation programs being described as helping patients regain a narrative identity that is not dominated by pain or by a fruitless chase after pain relief.

Conclusion: Chronic pain reminds us of our temporality and of the narrative character of our lives.

Plain Language Summary: It is important to distinguish acute pain from chronic pain. When pain is discussed by philosophers of medicine, this distinction is not always made. In the present paper, the phenomenon of chronic pain is analysed. It is argued that chronic pain reminds us of the fact that human beings are subject to time and that our lives can be viewed as a story unfolding in time. When pain persists, both past and future come to the fore. This contrasts with severe acute pain in which only the present counts, ie, getting rid of the pain now. This has practical and clinical implications, and it is argued that one of the potential benefits of interdisciplinary pain rehabilitation programs is to help patients reclaim the story of their lives from the dominion of pain and a fruitless chase after pain relief.

Keywords: chronic, chronification, narrative, pain, temporality, time

Introduction

Having a theoretically well-thought-out view of pain is arguably important not only for philosophers but also for clinicians and health-care personnel. In a previous paper, in a critical discussion of philosopher Murat Aydede's views,[1–4] I suggested that the experience of pain is not the perception of something but of someone – namely of the self and how the body that is I is affected by the world.[5] The present paper will explore pain further by bringing thoughts about time into the discussion. More precisely, if my previous paper was mainly about the phenomenon of acute pain, ie, pain as primarily a symptom of tissue damage and not as a disease in its own right,[5] the present paper will explore the phenomenon of chronic pain.

Importantly, the aim of the present paper is not to comprehensively review the biomedical literature about chronic pain, eg, concerning its pathophysiology. Rather, the present theoretical paper aims at analysing the phenomena of chronicity and chronification in the pain setting. It seems the distinction between acute and chronic pain is not always made by philosophers. By contrast, clinicians are well-aware of this distinction as it has great explanatory power when assessing and treating pain and when communicating with patients. Hence, this theoretical paper aims at introducing

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health-care personnel to a theoretical understanding of the phenomenon of chronic pain. Arguably, this is not just an academic endeavor. Understanding the situation of the chronic pain patient entails reflecting upon what the experience of chronic pain might philosophically entail from the perspective of the patient. This should include theoretical reflections about chronicity and long time – which is the aim of the present paper.

Methods

The paper is structured as follows: First, as an important methodological background, some aspects of the pain medicine concept of "chronic pain" will be very briefly reviewed. This section provides important information for readers who are not familiar with the field of pain medicine. Then, in the central and constructive part of the paper, I will try to describe chronic pain as being the perception of the self as a temporal being. In doing so, I will use a paper from Swedish philosopher Fredrik Svenaeus as a dialogue partner.[6] Finally, in a short concluding section, key insights of the present work will be summarized, pointing to some unanswered questions that would perhaps be worthwhile to investigate in a future paper.

The Pain Medicine Concept of Chronic Pain

Where should one begin when trying to analyse pain philosophically? Let us begin by an analogy that I think is illuminating. If one would be interested not in the philosophy of pain but in the philosophy of vision, it would seem sensible to begin not by analysing an eye disease such as glaucoma or retinitis pigmentosa, but by reflecting about vision itself. Another way of putting it would be that a philosophy of vision should first be construed positively ("what vision is"), and only then negatively ("what vision is when it is defective"). In other words, before defining what impaired vision is, one should consider what it means to see. Similarly, although the analogy of course has its limitations, I contend that a philosophy of pain should start with analysing acute pain. Only then should one go on to chronic pain.

Generally speaking, the pain medicine view is that while acute pain is a symptom of tissue damage, chronic pain can often be viewed more like a disease in its own right, ie, during the process of chronification the pain gradually becomes the disease.[7] Consider, for instance, acute pain after a surgical incision in the abdomen; in such cases, the pain is a symptom of the tissue trauma inflicted by the surgeon. But if chronic postsurgical pain develops, what was from the beginning an acute "normal" pain has turned into a disease of the pain system. This acute-to-chronic process is often described by the term transition, but it has recently been pointed out that one could conceptually and mechanistically envisage that acute pain is more like a trigger for the development of chronic pain, ie, that (mechanistically) chronic pain (eg, after surgery) would develop in parallel to the resolution of acute pain.[8] Be that as it may, from the point of view of the patient, ie, experientially, the pain has nonetheless transitioned from acute to chronic. The pain may be located in the surgical area, eg around the scar, but it does no longer correspond to an ongoing tissue damage. The pain is now not a symptom of something else being wrong, it is now the wrong in itself. In some ways, it is apt to say that such a person's pain is like a memory. It is obviously not the same thing as for instance remembering the grammar of a language one is trying to learn, but speaking of memory in this context is nonetheless much more than just a metaphor. The brain is highly plastic, and one of the things it can "learn" is pain. Of course, one does not choose to be in pain in the same way as one chooses to learn a language, and a person in chronic pain is indeed really in pain (the pain is not imagined). It is just that the pain is no longer a symptom of something else. It has become the problem. It is "the result of neural mechanisms gone awry".[9] About 20% of the adult population suffers from chronic pain,[10] and in the newly adopted eleventh version of the International Classification of Diseases (ICD-11) a whole new section about chronic pain has been added,[11] mirroring the fact that chronic pain is now commonly considered a disease category in its own right.

To summarize so far, I contend that the right place to start when reflecting philosophically about pain is to start with acute pain – which is in many ways what I did in my previous paper.[5] The foundation of a comprehensive pain philosophy should be found in how one views acute pain. But upon this foundation, one might (and should) reflect on the phenomenon of chronic pain, realizing that what is being studied is pathological just in the same way as eye diseases are pathologies of vision. The fact that we do (and should) try to alleviate acute pain, while we of course never try to abolish vision, is not relevant here. The point here is that acute pain is "normal" in the same way as vision is – it is a perfectly "healthy" to feel pain if you are injured. In fact, not being able to feel pain is dangerous; it is a serious threat to the

integrity of the organism and leads to significant suffering. Historically, Hansen's disease (leprosy) is a clear illustration of this, as are rare cases of congenital insensitivity to pain.[12]

Results and Discussion

Having been informed by the pain medicine concept of chronic pain and having previously analyzed (acute) pain philosophically,[5] I will now try to move the discussion forward by analyzing the concept of chronic pain. In doing so, I will use Svenaeus' paper The phenomenology of chronic pain: embodiment and alienation as a dialogue partner.[6]

Svenaeus' aim is "to give a phenomenological – person-centred and contextual – analysis of different aspects of chronic pain".[6] At the outset, it is apparent that Svenaeus, in contrast to at least some other philosophers in the field,[13,14] does not seem to make much about the distinction between acute and chronic pain. He tackles chronic pain head on. Indeed, when he complements his philosophical reasoning by descriptions of pain found in a novel by Swedish author Lars Gustafsson, he at the same time introduces the third major category of pain according to the pain medicine view, namely cancer-related pain. The trichotomy of acute, chronic, and cancer-related pain is a traditional "lens" in pain medicine,[15–17] and informed by this classical distinction, I will not in the present paper discuss cancer-related pain. Rather, for the sake of conceptual clarity, I will keep the discussion focused on chronic non-cancer pain; introducing a potentially deadly disease such as cancer into the discussion adds a life-and-death dimension to the picture and I therefore think that pain in that context should be viewed as a rather distinct (though not separate) philosophical problem.

These pain medicine distinctions notwithstanding, there is much in Svenaeus' description with which one feels bound to agree, eg concerning "the ways in which pain makes us prisoners in our own bodies, making it hard or even impossible to act in the world or focus on other things than the body itself". This is in many ways congruent with the views I have expressed in my previous paper. However, I would say that what Svenaeus writes is above all true of acute pain, ie, of intensive pain associated with recent tissue injury. Later, in the paper, Svenaeus notes the well-known work of Elaine Scarry on pain and torture, who has shown how torture closes the world to the sufferer – in torture, there is nothing left to life but pain. In severe acute pain, there is certainly this kind of closure of the world, ie, intense acute pain makes us aware of ourselves and unaware of the world.

Acute, intense pain as an awareness of the self and of the fact that its integrity has been breached is accompanied by a strong emotion. Indeed, the pain definition of the International Association for the Study of Pain (IASP) underlines the fact that pain is not only a sensation in body-parts; the definition also stresses the importance of emotions: "An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage".[18] And speaking of emotions, the distinction Svenaeus makes between emotions and moods will now be discussed.

The Chronification of Pain: Going from Emotion to Mood?

Although William James' famous question "What is an emotion?" has still not received an unequivocal answer,[19] the heuristic distinction Svenaeus makes between emotions and moods is nonetheless very interesting when considering the phenomenon of pain chronification. Generally speaking, moods can be viewed as more long-lasting feelings than emotions; moreover, emotions are about something specific, whereas moods do not have an identifiable object.[19] Applied to pain, and taking into consideration the above-mentioned IASP definition, it seems to me that the feeling of acute pain can be viewed as an emotion rather than a mood, ie, pain is a feeling about something specific and quite identifiable. But what about chronic pain? For Svenaeus, chronic pain is a good example of a mood. It is important to understand that moods "are not about particular things in the world, but rather determine the way the whole world appears to us, opening up the world to the person in a certain tone or colour, so to speak".[6] This view of chronic pain, ie that it is a mood, is congruent with the fact that chronic pain patients very often suffer from some kind of affective distress, eg depression (depression being indeed, from a psychiatric perspective, a mood disorder). Writing as a philosopher, Svenaeus hence touches on the importance of what in pain medicine is often called the "psychological" co-morbidities of chronic pain: depressive feelings, anxiety, anger. Hence, inspired by Svenaeus, I am inclined to view the phenomenon of pain chronification as a process whereby pain gradually turns from being an emotion (ie, a concrete

feeling about an identifiable "object") to being a mood (a more general feeling that "colours" the whole of life in a certain way). Of course, this is not strictly either-or; a chronic pain patient might experience pain flareups and, in such situations, an emotion related to the flareup may be superimposed on the general mood. However, while it is true that chronic pain patients still describe pain also as a sensory phenomenon (it is located somewhere, ie, the sensory-discriminative aspect of pain), the "feeling" part of it (ie, what is traditionally described as the affective-motivational aspect), it seems to me, is very much a mood more than an emotion (as per Svenaeus).

However, a certain incongruence seems to reside in the fact that chronic pain, according to Svenaeus, on the one hand, is an experience that "forces us in its most intense forms to focus exclusively on the lived body", while, on the other hand, in the same experience "the whole world appears to us … in a certain tone or colour". How can both things be true? Does pain entail a focus on the self, or is it a "coloring" of the world? Of course, it could be said that this is not a question of either-or, that it is to do with the intensity of pain ("in its most intense forms"). This is most certainly so but is it not also the case that there is a distinction to be made between acute, intense pain, on the one hand, (in which the world "disappears") and chronic pain, on the other hand (in which a certain mood colors the way one looks at the whole of life)? This is actually what I propose, and once again the distinction between acute and chronic pain seems to make sense, not only medically but also philosophically and phenomenologically. I hence submit that the process of chronification turns pain not only from an emotion to a mood but also that chronification entails a "re-opening" of the self to the world. Gradually, while pain chronifies, the sufferer "gazes up" from the self and is able to "see" the world again. However, this vision is often colored by a certain mood – the chronic pain mood. Once again turning to the above-mentioned example of a patient undergoing major abdominal surgery, such a patient can wake up from anesthesia with a crippling abdominal pain, eg, if the epidural does not work as intended. Having seen such patients myself as an anesthesiologist, I think that the idea of intense severe acute pain "closing" the world to the sufferer does indeed make a lot of sense. The patient writhes in pain, and only one thing counts: getting rid of the pain, right here and now. When morphine has been administered, or some other intervention has been performed, such a patient can again open up to the world outside of her body. She does not need to be completely pain-free to do that (it is indeed a question of degree in pain intensity), but for our purposes the interesting thing is that such a comparatively mild pain may get chronic. The tendency to focus on the self and its pain is of course still there, but the patient is not completely locked into the pain experience. She can, so to speak, lift the gaze from her body to interact with the world. But, as expressed by Svenaeus, "it takes a lot of energy"[6] to do so. And when she does, the chances are that a particular mood will color her experience of the world, ie, the chronic pain mood will be like a lens through which she will experience the world. Of course, the "intensity" of the coloring will be influenced by a myriad of factors, including the patient's coping capacity. Not all chronic pain patients are severely affected; for some, the coloring might only entail just a general feeling that it would have been nice not to have to deal with this pain. However, many chronic pain patients suffer from substantial disorders of mood.

The Chronification of Pain: Going from Present to Past-and-Future?

Although Stan van Hooft has a point when stating that pain "isolates persons from the world and from others",[20] I contend that this is mainly true for acute pain. By contrast, the patient in chronic pain is partially "open" to the world, and this openness is often characterized by a certain "mood". A second aspect of the chronification process, however, seems important. We have hitherto discussed the feelings inherent in the pain experience, but what about thoughts and cognitions? Traditionally, it is often said the pain experience has three aspects: a sensory-discriminative aspect, an affective-motivational (ie, pain as a "feeling"), and a cognitive-evaluative. Going back to the IASP definition of pain, the cognitive-evaluative aspect can be said to be captured by the words "*associated* with, or *resembling* that associated with, actual or potential tissue damage" (emphases added).[18] It is to this cognitive aspect that we now turn.

Traditionally, cognition has been viewed as one of the three essential components of the mind, the other two being affect ("feelings") and conation ("will").[21] A longstanding definition of cognition is that it "refers to all the activities and processes concerned with the acquisition, storage, retrieval and processing of information – regardless of whether these processes are explicit or conscious".[22] What then happens cognitively during the process of pain chronification? In acute severe pain, as we have seen, the person gets trapped in the experience of her own body. The world disappears, and what

is left is an intense experience of the self. But what also happens simultaneously is that the person in acute severe pain is cognitively trapped in the now. Simply put, the intensity of the pain emotion overpowers the cognitive capacities. For such a sufferer, what has been is not important, and the future is also absent from her thoughts. The only thing that really matters is to get rid of the pain as quickly as possible, ie, the cognitive activity of the self focuses solely on the meaning of pain now and how to get rid of it. But after a process of chronification has occurred, clinical experience indicates that the person's cognitive powers are no longer focused exclusively on the present. Gradually, the past (which was unimportant in severe acute pain, the pain experience making the person so to speak blind to the past) has become more and more important – in part precisely because of the fact that the pain that one now feels is (or is about to become) a chronic one. Perhaps, one could say that the experience of pain gradually acquires a dimension of temporal thickness and that therefore cognitive attention is gradually being devoted to this thickness. Also, and correspondingly, the more long-lasting the pain gets, the more important the future gets. In acute severe pain, the future is unimportant; what counts is getting rid of the pain now. When pain chronifies, the person begins to devote attention to the future not only in terms of getting rid of the pain but also in terms of fear about having to live like this "for ever". Hence, while pain chronifies, the time dimension of human existence is brought back to the fore, and it can do so in a cognitively disturbing manner. In addition to thoughts about the cause of pain, the chronic sufferer also thinks about both the future and the past. Hence, the world to which the chronic pain sufferer is partially open is a temporal world – a world in which past and future begin to matter a lot indeed, ie, the sufferer devotes his/her cognitive powers to temporal matters. And of course, this attention to temporal matters is also "colored" by the mood of chronic pain. Hence, it is not only the present world that has a "moody" character – the past and the future also have this quality.

If what has been proposed is correct, the person in chronic pain hence becomes aware of the self as a temporal being, ie, as a being immersed in a temporal world in which the past haunts you with grim memories and the future looms as a dark place one does not want to visit. Perhaps, it could even be said that it is difficult for the person in chronic pain to live in the now, ie, that carpe diem is an especially hard maxim to follow. According to this view, when pain chronifies, both the past and the future can begin dominating over the present. The experience of the "now" is so to speak swallowed up, on the one hand, by the past (by what has happened – chronic pain being a form of memory and as such having a tendency to intrude into the present; it cannot be forgotten), and, on the other hand, by the future (eg, the fear of having to live like this "forever"). Perhaps, these temporal aspects help explain why chronic pain can be so difficult to bear. It paints time, the time of our lives (a time that we presumably want to be long) with dark colors. Indeed, it could perhaps be said that chronic pain intensifies our awareness of time, of the fact that we are temporal beings and that there (more often than not) is a kind of moodiness attached to this experience (chronic pain as a "mood" rather than an emotion). We now turn to a third aspect of the chronification of pain: its potential relation to the issue of narrative identity.

The Chronification of Pain: Acquiring a "Painful" Narrative Identity?

It seems to me that in Svenaeus' account of "different aspects of chronic pain", the temporal part inherent in the concept of "chronic" is strangely lacking. However, it could be argued that the concept of time is implicitly present in Svenaeus' section about "Pain, work and the meaning of suffering". For instance, when summarizing that part of his paper, Svenaeus writes that pain "afflicts and threatens *the whole life* and *identity* of the sufferer" and that it "resists all attempts to find meaning and purpose in the experiences one is *undergoing*" (emphases added).[6] The emphases I have added to the previous quote point to temporality, but (as I read Svenaeus) temporality is understood as meaning-making and identity-building. In other words, Svenaeus alludes to life as being a narrative focused on meaning-making, and pain (according to him) makes it difficult to focus on "the meaning structures of the world she is normally engaged in". In my opinion, there are strong links here to the question of narrative identity, which is "a person's internalized and evolving life story, integrating the reconstructed past and imagined future to provide life with some degree of unity and purpose".[23] Inspired by Svenaeus, I propose that chronic pain may re-shape the narrative identity of the affected individual.

Narrative identity is about how "people convey to themselves and to others who they are now, how they came to be, and where they think their lives may be going in the future".[23] Hence, narrative identity can in large parts be viewed as a social phenomenon, as an expression of human relationality. Clinical experience seems to warrant the hypothesis that the life story of chronic pain patients often becomes dominated by pain, or more precisely by the fact that pain has been

going on for so long. In other words, the narrative identity of chronic pain patients can be dominated by the experience of pain. In such cases, I propose that narrative identity has been reshaped by pain.

In this context, it might be helpful to consider what is going on in chronic pain rehabilitation programs. Given the poor results of medicines and other medical interventions when it comes to treating chronic non-cancer pain, interdisciplinary rehabilitation programs have been developed to help patients live with their chronic pain condition. The logic behind these programs is that, if the pain cannot be taken away, then there are at least ways in which patients can learn to live meaningful lives despite the presence of pain. I think it makes sense to view such programs as aiming to help the patient regain a narrative identity that is not dominated by pain. Indeed, chronic pain patients often keep on chasing a solution that will take away the pain, and (for some at least) life is dominated by this fruitless chase. They begin avoiding whatever hurts (thinking the pain is a sign of tissue damage), and gradually their life sphere diminishes and eventually everything is viewed through the lens of pain (c.f. the mood discussion above). Arguably, the function of chronic pain rehabilitation programs is (at least partly) to help patients gain another narrative identity, an identity that does not have pain as its center. Needless to say, this is a difficult endeavor.

Narrative identity research has shown that people who emerge strengthened by negative life experiences often describe a two-step process. First, they reflect on what they have gone through and how their life story fits into this suffering; this step is associated with personal growth. Then, "the person articulates and commits the self to a positive resolution of the event";[23] this is associated with happiness. Hence, making narrative sense of the suffering that one experiences is an important way to cope and adapt. In this way, time and narrative are linked to existential issues of meaning and the question of "the good life" (eudaimonic well-being).[24] From this perspective, interdisciplinary rehabilitation programs could be viewed as an opportunity to engage in the above-mentioned two-step process, eventually resulting in a (partially) new narrative identity whereby the patient no longer "is" his or her pain.

Conclusion and Future Work

In a previous paper,[5] the concepts of egoception and cosmoception were introduced as perhaps better terms than their respective counterparts interoception and exteroception, the new terms being more precise concerning the fundamental duality between body-self and world. Pain would then be an instance of egoception and not cosmoception, ie, pain is the perception of the body-self and not the perception of a state of affairs in the world "outside" of my body. If I feel that the edge of a knife is sharp, this is cosmoception (a fact about the world), but if the knife cuts through my skin, the pain that I will feel is egoception – the pain is about me and how the world affects me, and not about the knife itself. In the present paper, the discussion has been brought forward by discussing chronic pain, and it has been argued that the process of pain chronification includes a transformation from pain as emotion to pain as mood, that it entails an enhanced awareness of our temporality (both past and future), and that this often results in a pain-related narrative identity. Hence, chronic pain makes us aware of our temporality, of the fact that we are temporal beings living in our own story. Death being the end of the story, there are arguably a high number of existential issues at play when the experience of pain is associated with the presence of a deadly disease. Indeed, traditionally, cancer-related pain is viewed as the third major pain medicine category, alongside acute pain and chronic non-cancer pain. In the present paper, for the sake of conceptual clarity, cancer-related pain has not been discussed, the focus being non-cancer chronic pain. In future work, it would be interesting to move the discussion forward by also including our mortality in the analysis, ie, to explore in what sense the phenomenon of cancer-related pain could be viewed as a forceful reminder not only of our temporality but also of our mortality.

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different sociocultural, historical, and religious views on the interpretation of temporality in the chronic pain setting would indeed be an interesting area to explore. However, such a discussion falls outside the scope of the present paper.

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