Slippery Slopes and Vagueness
Slippery slope reasoning, typically taken as a fallacy.

But what goes wrong? Is it always bad reasoning? How should we respond to a slippery slope argument and/or guard against it leading us astray?
2 types of slippery slope arguments:

**Causal**
Claim that one thing will *lead to* another, and so on down the slope, to a (typically repugnant) endpoint.
E.g. from voluntary euthanasia .... to involuntary euthanasia
   Can question the causal claim – will conclusion *really* follow?
   Or can question whether the endpoint is really unacceptable.

**Semantic**
There’s no significant difference between one thing and the next in the chain, leading right through to the (perhaps absurd) conclusion.
No non-arbitrary divisions
E.g. abortion right before birth is wrong; one day earlier is still wrong .... so abortion is wrong at any point after conception.
Causal slippery slopes can be based on semantic ones. E.g. the thought that because there’s no non-arbitrary cut-off, one stage will lead to the next.

We’ll focus on semantic slippery slopes.

They are examples of the *Sorites Paradox*.

The denial of a non-arbitrary division is due to the *vagueness* of the ideas involved.
Consider a heap of sand. If you take one grain away, you still have a heap. Indeed, whenever you take just one grain away from a heap of sand, you’re left with a heap. But, then, if you remove grains one by one this implies, absurdly, that the solitary last grain is a heap.

Sorites Paradox for ‘heap’. 
Soros = heap.
Sorites paradox for ‘tall’:
(1) 7 foot man is tall
(2) A hundredth of an inch cannot make a difference to whether or not a man counts as tall
So (3) a 5 foot man is tall

Compare slippery slope arguments:
E.g. for (2): if abortion is wrong n days after conception, then it’s wrong n-1 days after conception.

Same form of reasoning as mathematical induction:
True for 0, if true for k then true for k+1; so true for n.

The form of reasoning isn’t a logical fallacy like If p, then q, q so p.
A paradox:
compelling premises, intuitively valid reasoning but an apparently false conclusion.

Paradox due to the vagueness of the central term.

Because ‘heap’ is vague, the removal of a single grain can’t make all the difference to whether something counts as a heap; if it did ‘heap’ would not be vague.

Vague predicates:

- have borderline cases
- lack sharp boundaries

Sorites paradoxes for all vague predicates, e.g. ‘bald’, ‘child’, ‘red’
(Solutions within theories of vagueness)
Four types of solution:

(a) deny the validity of the argument, refusing to grant that the conclusion follows from the given premises; or

(b) Reject premise (2) (the inductive premise); or

(c) contest the supposed truth of premise (1); or

(d) contest the supposed falsity of the conclusion (3)

The argument has the same form as mathematical induction and other reasonable arguments without vague terms, so (a) looks unappealing.

(c) and (d) come together as a pair.
(c) contest the supposed truth of premise (1); or
(d) contest the supposed falsity of the conclusion (3)

Can run either way down a sorites series:
   (H+) one grain of sand is not a heap
   adding a single grain to a non-heap will not turn it into a heap;
   so, ten thousand grains do not form a heap.

   (H−) ten thousand grains make a heap
   removing one grain from a heap still leaves a heap;
   so, a single grain of sand is a heap.

Accept the premises and the validity of (H+):
it follows that we will never get a heap, no matter how many grains
are piled up
So there are no heaps (Accepting the conclusion)
With \((H-)\) reject first premise.

\((H-)\) ten thousand grains make a heap removing one grain from a heap still leaves a heap; so, a single grain of sand is a heap.

Sorites paradox for ‘tall’ shows no-one is tall, Sorites paradox for ‘bald’ shows there are no bald people, Sorites paradox for ‘table’ shows there are no tables.

Unger: ‘There are no ordinary things’.

Not promising as a treatment for all sorites argument [But in some instances of slippery slope arguments, (c) or (d) might be the right response.]
(b) (2) is not true.

(2) A hundredth of an inch cannot make a difference to whether or not a man counts as tall
(2) If you take one grain away from a heap of sand, you still have a heap
(2) If abortion is wrong \( n \) days after conception, then it’s wrong \( n-1 \) days after conception.

If each of these is false, we have
\( x \) is tall and \( y \) is not tall, though \( y \) is only one hundredth of an inch shorter than \( x \).
Some particular grain turns the heap into a non-heap
Abortion is wrong \( k \) days after conception but not wrong the previous day

So vague predicates have *sharp boundaries* after all?
Vague predicates have *sharp boundaries* after all?

*Epistemic View* – vague predicates have sharp boundaries but we *do not know* where those boundaries lie. (Williamson)

There’s a single correct stopping point on the slippery slope, though we can’t know where that is.

Implausible??
Stipulation can provide sharp boundaries.

Common for legal purposes.

But often no stipulation actually has been made. And many different options would be OK if stipulation were required.

So, appeal to stipulations doesn’t give grounds for the Epistemic View or solve the sorites paradox.

May be useful to consider all the sensible stipulations in a particular case.

Supervaluationist Theory of Vagueness
Supervaluationism

Borderline cases are neither true nor false – the meaning of the predicate isn’t determinate enough to settle them either way.

Consider the various different ways of making ‘tall’ precise: our language doesn’t settle that any one of these gives the meaning of ‘tall’.

We can still call any sentence true (or false) if it would be true (or false) on all ways of making its components precise. A borderline case sentence – e.g. ‘Tek is tall’ is true on some ways and not on others, so counts as neither true nor false.
Does the removal of a grain turn a heap into a non-heap?

There is no particular grain for which is it true (on all ways of making ‘heap’ precise) that it makes all the difference to whether you have a heap (hence ‘heap’ lacks sharp boundaries).

But since some grain makes the difference for each way of making ‘heap’ precise, ‘some grain makes the difference’ is true.

Premise (2) is false.

(2) A hundredth of an inch cannot make a difference to whether or not a man counts as tall
Using Supervaluationism to deal with a slippery slope argument:

Ask: would you reject the premise however you make your notions precise? If so, then reject it. Doesn’t mean that there is a non-arbitrary cut-off.

The typical behaviour of vague terms is to allow a chain of insignificant differences to add up to a significant difference. We need to be wary of arguments that trade on this. Thinking about how vague expressions work can help with that.